DISTRIBUTION OF FISH EGGS AND LARVAE, TEMPERATURE, AND SALINITY IN THE GEORGES BANK-GULF OF MAINE AREA, 1956





UNITED STATES DEPARTMENT OF THE INTERIOR, STEWART L. UDALL, SECRETARY
Fish and Wildlife Service, Clarence F. Pautzke, Commissioner
Bureau of Commercial Fisheries, Donald L. McKernan, Director

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by

Robert R. Marak, John B. Colton, Jr., Donald B. Foster, and David Miller



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ABSTRACT

Basic data on the distribution of fish eggs and larvae in the Georges Bank-Gulf of Maine area were collected on surveys made by the Bureau of Commercial Fisheries research vessel Albatross III during the spring of 1956. The data are presented in tabular and graphic form. Plots and tables of surface temperature and salinity are also included.

INTRODUCTION

This is the third in a series of reports presenting basic data on fish egg and larvae surveys made on the research vessel Albatross III in the Georges Bank-Gulf of Maine area.

Information on the background of the surveys, objectives, methods, and procedures followed at sea and in the laboratory are given in the report for 1953 (Marak and Colton, 1961).

COLLECTION OF DATA

Five cruises were made during the spring of 1956: cruise no. 71, February 20-March 2; cruise no. 72, March 21-31; cruise no. 73, April 17-28; cruise no. 75, May 16-29; and cruise no. 76, June 11-24. The June cruise was added to the program this year to try and obtain more information on the distribution of haddock larvae.

The procedure involved continuous towing of the Hardy Plankton Recorder's (Hardy,

1936 and 1939) at the surface and 10 meters, bathythermograph lowerings, surface temperature and salinity observations, drift bottle releases, and surface tows with a 1-meter net.⁴

A list of the species of fish eggs and larvae (with species code letters used in the tables) collected during the 1956 survey cruises is given in table 1.

Data for temperature and salinity observations in relation to 1-meter tows and Hardy Plankton Recorder gauze sections are given in tables 2-6.

The cruise plan and methods (Hardy Plankton Recorder, 1-meter net tows, and drift bottles) used aboard ship for the collection of data presented in this report are the same as those followed in the spring of 1953 (Marak and Colton, 1961).

A more complete coverage of the eastern and southern edge of Georges Bank, Browns Bank, and penetration into the Bay of Fundy was made in 1956 in an attempt to gain more information on the drift of fish eggs and larvae. Drift bottle recoveries from previous surveys suggested considerable movement of

¹ Temporarily detailed to Bureau of Commercial Fisheries Biological Laboratory, Auke Bay, Alaska,

² Presently employed at the Woods Hole Oceanographic Institution, Woods Hole, Massachusetts,

³ No. 3 silk was used in making the gauzes for the Hardy Plankton Recorder.

⁴ No. 0 silk was used in the 1-meter net.

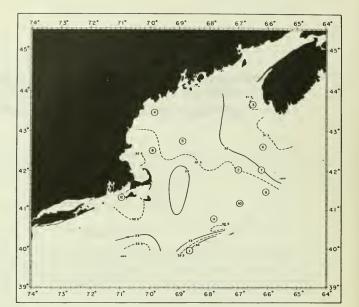


Figure 1,--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 71, February 20 to March 2, 1956.

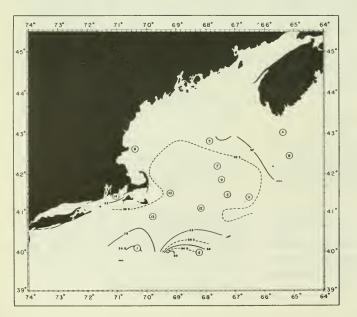


Figure 2,--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 72, March 21-31, 1956.

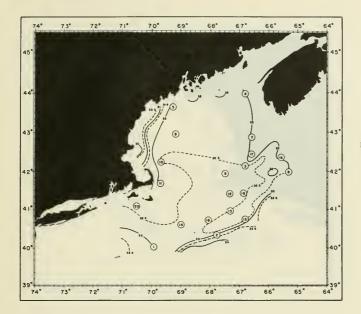
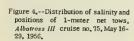
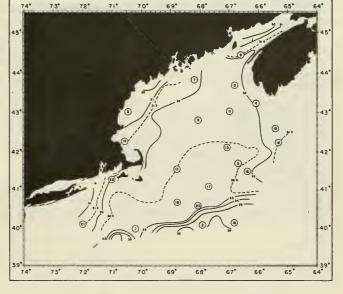


Figure 3.--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 73, April 17-28, 1956.





7.3° 72° 71° 70° 69° 68 67° 66° 65° 45 43 (19) 42 41 40 73° 72° 71° 70° 69° 68 67° 66° 65 74°

Figure 5,--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no, 76, June 11-24, 1956.

surface water off the eastern and southern edges of Georges Bank, and into the Bay of Fundy from Browns Bank. Positions of drift bottle releases and recoveries for 1956 may be found in Bumpus and Day (1957).

LABORATORY EXAMINATION OF SAMPLES

One-Meter Net Tows and Hardy Plankton Recorder

Analysis of the data taken with the 1-meter net and Hardy Plankton Recorder during this year was carried out in the same manner as that presented in the first report (Marak and Colton, 1961). Figures 1-5 show the locations of 1-meter net tows and tables 7-11 give the data collected. The locations of individual gauze sections exposed by the Hardy Plankton Recorder are shown on figs. 6-15, and the data obtained from these sections are given in tables 12-16. The section equivalent varied slightly with individual recorders, and with distances covered (see tables 17-21). Actual

locations of 1-meter tows and reference gauze sections are given in tables 2-6.

Temperature and Salinity

Surface temperatures were used in the graphic presentation in this report as they were generally found to be indicative of temperatures in the depths of water studied (surface and 10 meters), Figures 16-20 show the distribution of surface temperature with observed values rounded off to the nearest whole ^OF. In areas of rapid temperature change (southern and southeast edge of Georges Bank), some isotherms were omitted to avoid confusion. Figures 1-5 show the distribution of surface salinity with observed figures rounded off to the nearest 0.50/00. Actual temperature and salinity figures may be found in tables 2-6.

Drift Bottles

A detailed analysis of the data obtained from the drift bottles released on these cruises during the spring of 1956 has been reported by Day (1958).

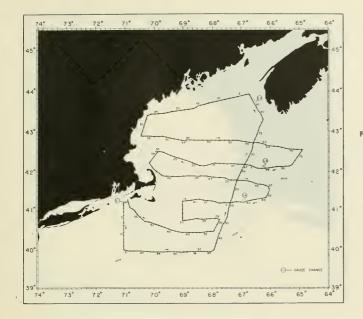


Figure 6,--Track of Albatross III cruise no, 71 (February 20 to March 2, 1956) giving positions for each gauze section of the surface Hardy Plankton Recorder.

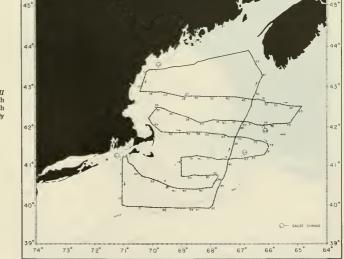


Figure 7.--Track of Albatross III cruise no. 71 (February 20 to March 2. 1956) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

71

70°

72°

71°

72°

73°

39° 74°

73°

7.0°

6,9°

67°

68°

66°

66°

67°

65°

65°

64°

69° 68° 66° 65° 64° 71° 70° 67° 73° 72° -43° 42 41 40° 40° G- GAUZE CHANGE 39° 39° 69° 68° 67° 66° 65°, 74° 73° 72° 70°

Figure 8,--Track of Albatross III cruise no, 72 (March 21-31, 1956) giving positions for each gauze section of the surface Hardy Plankton Recorder,

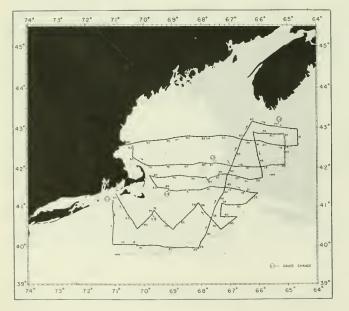


Figure 9,--Track of Albatross III cruise no, 72 (March 21-31, 1956) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

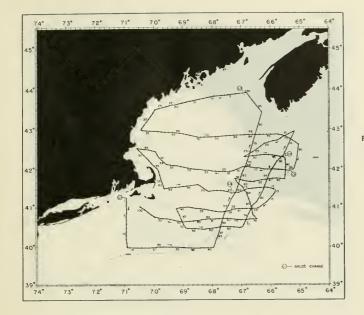
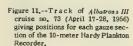
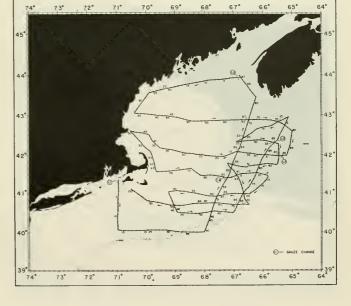


Figure 10,--Track of Albatross III cruise no. 73 (April 17-28, 1956) giving positions for each gauze section of the surface Hardy Plankton Recorder.





71° 69° 66° 65° 64° 70° 6.7° 73° 72° 68° 45 43 42° 42" 41 40 40 - GAUZE CHANGE 39° 39° 74° 73° 72° 71° 70° 69° 68° 67°

Figure 12,--Track of Albatross III cruise no, 75 (May 16-29, 1956) giving positions for each gauze section of the surface Hardy Plankton Recorder,

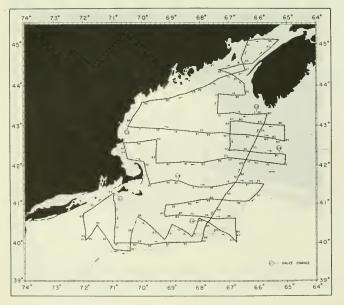


Figure 13,--Track of Albatross III cruise no. 75 (May 16-29, 1956) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

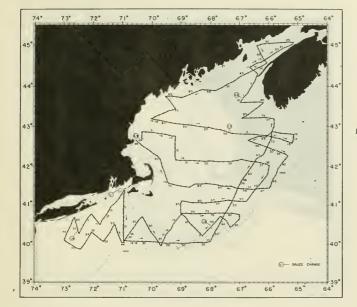
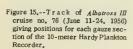
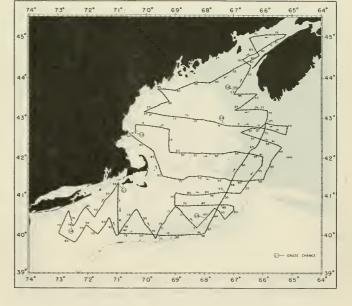


Figure 14.--Track of Albatross III cruise no. 76 (June 11-24, 1956) giving positions for each gauze section of the surface Hardy Plankton Recorder.





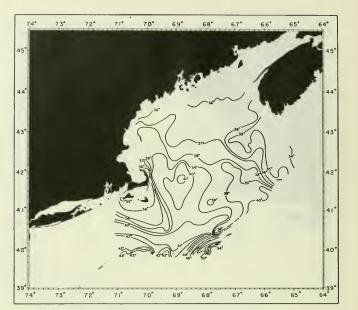


Figure 16.--Distribution of surface temperature. Albatross III cruise no. 71, February 20 to March 2, 1956.

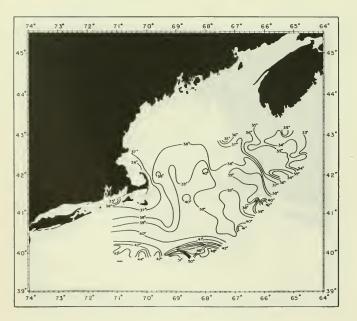
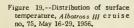
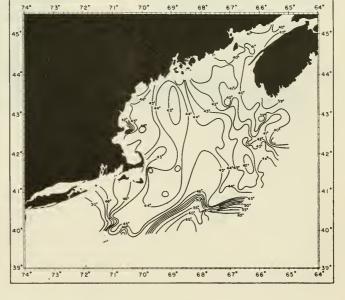


Figure 17.--Distribution of surface temperature. Albatross III cruise no. 72, March 21-31, 1956.



Figure 18,--Distribution of surface temperature, Albatross III cruise no. 73, April 17-28, 1956,





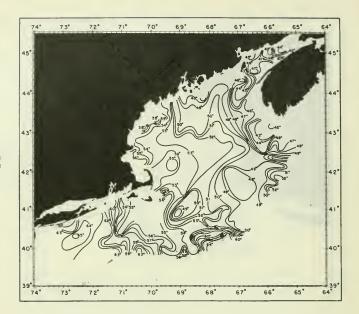


Figure 20,--Distribution of surface temperature, Albatross III cruise no. 76, June 11-24, 1956.

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Table 1.--Species of fish eggs and larvae (with species code letters) caught during 1956, Albatross III cruise no. 71, February 20 to March 2; cruise no. 72, March 21-31; cruise no. 73, April 17-28; cruise no. 75, May 16-29; cruise no. 76, June 11-24.

Species code	C	Scientific name
letters	Common name	Scientific name
A	American plaice	Hippoglassoides platessoides
AM	American sand lance	Ammodytes americanus
BU	Butterfish	Poronotus triacanthus
C	Atlantic cod	Gadus morhua
CN	Cunner	Tautogolabrus adspersus
CU	Cusk	Brosme brosme
G	Goosefish	Lophius americanus
Н	Haddock	Melanogrammus aeglefinus
HE	Atlantic herring	Clupea harengus harengus
LA	Lanternfish	Myctophum affine
LF	Lumpfish	Cyclopterus lumpus
LP	"Leptocephalus" stage	
M	Atlantic mackerel	Scomber scombrus
MH	Atlantic menhaden	Brevoortia tyrannus
MU	Striped mullet	Mugil cephalus
NE	Atlantic saury	Scomberesox saurus
P	Pollock	Pollachius virens
PU	Puffer	Tetraodontidae (family)
R	Redfish	Sebastes marinus
RH	Squirrel hake	Urophycis chuss
RO	Fourheard rockling	Enchelyopus cimbrius
RU	Banded rudderfish	Seriola zonata
S	Scup	Stenotomus chrysops
SB	Threespine sticklehack	Gastero steus acule atus
SC	Longhorn sculpin	Myoxocephalus octodecemspinos
SH	Silver hake	Merluccius bilinearis
SPH	Spotted hake	Urophycis regius
SR	Northern searobin	Prionatus carolinus
SSN	Striped seasnail	Liparis liparis
SU	Rough scad	Trachurus lathami
SY	Shanny	Stichaeidae (family)
U	Unidentified	,
W	Wrymouth	Cryptacanthodes maculatus
WF	Witch flounder	Glyptocephalus cynoglossus
WH	White hake	Urophycis tenuis
Wl	Windowpane	Scopthalmus aquosus
WIF	Winter flounder	Pseudopheuronectes americanus
WO	Atlantic wolffish	Anarhichas lupus
Y	Yellowtail flounder	Limanda ferruginea

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 71, February 20-March 2, 1956

					,		Sur	face	
		Lat-	Longi-		Surface	10-meter	Jui		10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
		N.	w.	tow	section	section	ity	pera-	ature
							,	ture	
					loading 1	loading 1	%	° F.	
T 1 00	17.00	410 141	71° 01'		loading l			36.1	36.0
Feb. 20	17 00	41° 14' 40°03.5'	71° 01'		1 3	2 3	32.19	36.3	36.3
Feb. 20 Feb. 20	1905	40°53.5'	71° 01'		4	4	32.63	38.2	38.1
Feb. 20	2005	40°44.5'	71° 01'		6	6	32.03	39.9	39.9
Feb. 20	2105	40° 31'	71°01.2'		9	7	32, 82	40.5	40.5
Feb. 20	2205	40° 20¹	71° 00'		11	9		42.4	42,2
Feb. 20	2305	40°09.51	71° 00'		13	10	32, 99	42.5	42.5
Feb. 21	0005	39°59.5'	70°59.51		15	12		43.1	43.2
Feb. 21	0105	39° 581	70°48.51		16	13	33, 42	44.5	44.6
Feb. 21	0200	39°58.51	70° 381		18	14		43.3	43.3
Feb. 21	0305	39° 581	70° 26'		20	15	33.67	45.4	45.2
Feb. 21	0400	39°56.51	70° 151		21	16		45.0	45.0
Feb. 21	0500	39°56.51	70° 001		23	18	33.72	45.7	45.6
Feb. 21	0605	39°56.5'	69° 46'		25	19		41.8	41.9
Feb. 21	07 05	39°57.5'	69° 331		27	21	33.13	42.8	42.8
Feb. 21	0805	39°57.5'	69°20.5'		29	22		43.5	43.3
Feb. 21	0905	39° 57'	69°09.51		31	23	32.83	41.2	41.5
Feb. 21	1005	39°56.51	68°55.51		33	24		42.0	42.0
Feb. 21	1100	39° 57'	68°43.51		34	25	33.19	43.1	43.2
Feb. 21	1200	39° 57'	68° 31'	1	36	26		46.2	46.2
Feb. 21	1300	39° 57'	68° 24'		37	27	34.76	50.3	50.2
Feb. 21	1400	39° 57'	68°10.5'		39	29		49.6	49.6
Feb. 21	1505	39° 581	67°59.5'		41	30	35.22	52.6	52.6
Feb. 21	1605	40° 051	67° 54'		42	31	24 52	53.9	54.0
Feb. 21	1705	40°14.2¹	67°49.51		44	32	34.52	48.9	49.0
Feb. 21	1800	40°21.5'	67° 451		47	35	32, 22	38.3	38.4
Feb. 21	1900	40° 30¹ 40° 40¹	67°41.5'		49	36	32.22	38.6	38.5
Feb. 21 Feb. 21	2005	·40° 461	67° 30'		51	37	32.68	40.1	39.9
Feb. 21	2205	40°53.51	67° 26'		52	39		39.9	39.9
Feb. 21	2305	41° 021	67° 24'		54	40	32.58	39.7	39.6
Feb. 22	0005	41° 11'	67° 22'		56	41		39.2	39.2
Feb. 22	0100	41°18.5'	67°17.7'		57	42	32,87	39.6	39.5
Feb. 22	0200	41° 27'	67°14.3'		59	44		39.5	39,6
Feb. 22	0300	41°36.31	67° 11'		61	45	32.83	39.6	39.6
Feb. 22	0400	41° 36'	67°07.2'		63	47		39.6	39.8
Feb. 22	0500	41°55.31	67° 01'		65	48	32.73	39.6	39.€
Feb. 22	0600	42°04.8'	66°55.81	2	67	50		39.5	39.5
Feb. 22	0805	42° 181	66°45.5'		69	51	32, 21	37.4	37.4
Feb. 22	0905	42° 271	66° 40'		70	53		35.4	35.7
Feb. 22	1005	42°35.51	66° 351		71	54	31.60	35.2	35.2
Feb. 22	1100	42° 45'	66° 321		73	55		35.2	35.2
Feb. 22	1205	42° 541	66° 261		74	57	31.67	35.6	35.7
Feb. 22	1300	43° 031	66° 231		76	58		35.8	35.9
Feb. 22	1400	43°10.5'	66°18.5'		77	59	31.48	35.3	35.2
Feb. 22	1500	43°18.8'	66°13.3'		78	60		34.8	34.8
Feb. 22	1600	43°24.81	66°17.5'		79	61	31.60	35.9	35.9
Feb. 22	1700	43° 33'	66° 241		81	62	1	35.9	35.9
Feb. 22	1800	43°42.5'	66° 31'	3	82	63	31.43	35.6	35.6

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 71, February 20-March 2, 1956--Continued

							Surf	ace	
		Lat-	Longi-		Surface	10-meter	1		10-meter
Date	Time	itude	tude	l-meter	gauze	gauze	Salin-	Tem-	temper-
Dave	1 1111	N.	W.	tow	section	section	ity	pera-	ature
		14.	" .		Beetton	beetion	ity	ture	
					looding 2	landing 2	%	° F.	
					loading 2	loading 2			
Feb. 22	2005	43°49.51	66°35.51		1			36.5	36.5
Feb. 22	2055	43° 56'	66° 41'	~-	3		31.80	36.4	36.4
Feb. 22	2205	43°54.51	66°54.51		4			36.2	36.1
Feb. 22	2305	43° 531	67° 061		6		31.92	35.6	35.5
Feb. 23	0005	43° 51'	67° 18'		7			37.0	37.1
Feb. 23	0100	43° 50'	67° 30¹		8		32.02	36.3	36.3
Feb. 23	0200	43° 47'	67° 41'		10			36.4	36.4
Feb. 23	0300	43° 451	67° 53'		11		32.16	36.2	36.2
Feb. 23	0400	43° 441	68°05.51		12			36.4	36.4
Feb. 23	0505	43° 40'	68° 181		14		31.99	36.4	36.4
Feb. 23	0600	43° 381	68°27.7'		15			36.2	36.3
Feb. 23	07 05	43° 351	68° 36'		17	~-	32, 28	36.4	36.1
Feb. 23	0810	43°33.51	68° 55'		19			36.4	36.4
Feb. 23	0905	43°30.51	69° 08'		20		32.00	36.9	36.8
Feb. 23	1005	43°30.5'	69° 22'		22			36.7	36.7
Feb. 23	1110	43°27.5'	69° 37'		23		32.08	36.8	36.8
Feb. 23	1215	43°26.5'	69° 50'	4	25			36.4	36.5
Feb. 23	1405	43°26.5'	70° 04'		26	3	32.23	36.1	36.1
Feb. 23	1500	43°23.6'	70°13.8'		28	5		36.3	36.4
Feb. 23	1600	43°11.7'	70° 191		30	7	32, 42	37.6	37.4
Feb. 23	1700	43°02.5'	70° 23'		31	9		37.9	37.9
Feb. 23	1800	42° 54'	70° 241		33	12	32, 58	37.7	37.6
Feb. 23	1905	42° 541	70°09.51		35	14		38.3	38.3
Feb. 23	2005	42°53.5'	69° 54¹		37	17	32.64	38.4	38.4
Feb. 23	2105	42° 541	69°41.5'		39	19		37.9	37.7
Feb. 23	2205	42° 521	69° 27'		40	21	32.13	37.2	37.2
Feb. 23	2305	42°49.5'	69°12.5'		42	23		36.6	36.6
Feb. 24	0005	42°46.5'	68°59.51	5	44	25	32,06	36.8	36.8
Feb. 24	0100	42° 48'	68° 521		45	27	02.00	37.6	37.7
Feb. 24	0205	42°47.5'	68° 40'		46	28	32,28	37.6	37.6
Feb. 24	0305	42°47.5'	68° 26'		48	30		37.2	37.3
Feb. 24	0400	42°48.5'	68° 14'		49	32	32, 09	36.7	36.7
Feb. 24	0500	42° 481	68°00.51		50	34		36.9	36.9
Feb. 24	0600	42° 481	67°47.51		52	36	32.29	37.4	37.4
Feb. 24	07 00	42°47.5'	67° 34'		53	38		37.5	37.5
Feb. 24	0805	42°47.5'	67°19.5'		55	40	31.74	35.3	35.4
Feb. 24	0905	42°46.5'	67° 04'		57	43		35.0	35.1
Feb. 24	1005	42° 451	66° 50'		59	45	31.59	35.4	35.4
Feb. 24	1105	42°43.5'	66* 351		60	47	51.55	35.6	35.5
Feb. 24	1205	42° 441	66° 20'		62	49	31.70	35.8	35.8
Feb. 24	1300	42° 421	66°07.81	6	63	51	31.10	35.9	36.1
Feb. 24	1400	42° 391	65°59.51		64	53	31.63	34.8	34.8
Feb. 24	1500	42° 38'	65°45.51		66	55	31.03	34.6	34.5
Feb. 24	1600	42° 36'	65° 321		68	57	31.47	34.6	34.5
Feb. 24	1700	42°35.8'	65° 19'		69	59	31.41	34.7	34. 4
Feb. 24	1800	42°35.5'	65°06.5'		71	61	31,66	34.1	33.9
Feb. 24	1905	42° 35.5°	64° 52'	1	73	63	31.00	34.1	33.9
Feb. 24	2005	42° 251	65° 001		75		31.91	33.8	33.9
Feb. 24	2105	42° 17'	65° 081	1		65			
Feb. 24	2205	42°10.5'			77	67	21 00	34.1	34.1
reb. 24	2203	42 10.5	05, 14,	1	78	69	31.89	34.4	34.4

Table 2. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 71, February 20-March 2, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Sur	face	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	a	Tem-	temper-
		N.	W.	tow	section	section	Salin-	pera-	ature
							ity	ture	
				-					
							%	0.5	
77-1- 0.4	0005	400 004	050 001	İ	70			°F.	
Feb. 24 Feb. 25	2305 0005	42° 08' 42° 08.5'	65° 26' 65° 37'		79	71		35.4	35.4
		42°07.51	65° 501	I	81	73	31.62	34.4	34.6
Feb. 25 Feb. 25	0100 0205	42° 061	66° 01'	7	83	74		34.6	34.6
reb. 25	0205	42 00	00-01,	(84	76	31.92	35.6	35.7
Feb. 25	0255	42° 061	66° 09'		loading 3	loading 3		20.2	20.0
Feb. 25	0505	42°06.11	66° 251		4	3		36.3	36.2 38.3
Feb. 25	0600	42° 10'	66°38,81		6	5	32.43	38.4	37.7
Feb. 25	07 05	42° 11'	66° 54'		7	7	32.38	38.1	38.1
Feb. 25	0805	42° 12'	67° 041		9	9	34.30	38.8	38.8
Feb. 25	0905	42°12.51	67° 17'		10	11	32,60	39.5	39.5
Feb. 25	1005	42° 12'	67° 30'		12	13		39.5	39.4
Feb. 25	1105	42° 12'	67° 41'		13	15	32, 44	38.7	38.5
Feb. 25	1205	42° 13'	67° 54'		15	17		38.0	37.8
Feb. 25	1300	42°11.8'	68°03.21		16	18	32.39	38.5	
Feb. 25	1400	42°09.51	68°13.5'		17	19		39.2	
Feb. 25	1500	42°09.41	68°25.21		19	21	32,60	39.0	
Feb. 25	1600	42° 141	68°37.5'		21	23		38.8	
Feb. 25	1700	42°17.11	68°49.61		22	25	32,78	39.9	
Feb. 25	1800	42°20.51	69° 011		24	27		38.3	
Feb. 25	1900	42°23.41	69°14.6'		25	29	32, 32	38.3	
Feb. 25	2000	42°26.81	69°26.5'		27	31		39.3	
Feb. 27	1740	42° 301	69°52.31	8	30	35	32.81	39.5	39.4
Feb. 27	1905	42° 22'	70° 001		35	40		38.8	38.8
Feb. 27	2005	42°12.51	70° 081		36	43	32.48	37.0	37.0
Feb. 27	2105	42° 05'	70° 00°		37	44		35.9	36.0
Feb. 27	2205	41° 58'	69° 481		38	45	32.70	39.1	39.1
Feb. 27	2305	41° 54'	69° 381		39	48		39.8	39.8
Feb. 28	0005	41° 531	69° 251		40	50	32.92	39.9	39.9
Feb. 28	0100	41°52.7'	69°12.3'		41	51		39.8	39.8
Feb. 28	0200	41°52.7'	69°00.81		42	53	33.10	41.1	41.1
Feb. 28	0300	41°53.1'	68°47.61		43	5.5		41.2	41.2
Feb. 28	0400	4153.31	68°35.2'		44	56	32.98	40.7	40.8
Feb. 28	0500	41°53.5'	68°24.5'	~ -	45	58		39.4	39.5
Feb. 29	0200	41°50.5'	67° 44¹		48	63	32.61	39.1	39.2
Feb. 29	0300	41°49.51	67°32.8'		49	65		39.3	39.3
Feb. 29 Feb. 29	0400 0500	41°48.5'	67° 21' 67°09.7'		50 51	66	32.60	39.0 39.2	39.1
Feb. 29	0600	41°46.5	66° 581	==	52		32.76		
Feb. 29	0705	41° 46'	66° 451		53	69 70	32.70	39.1	39.1
Feb. 29	0805	41° 41'	66°34.51		54	72	32.78	39.6	39.6
Feb. 29	0905	41° 42'	66° 231		55	74	32,10	39.8	39.8
Feb. 29	1005	41°40.5'	66° 121		56	75	32,76	39.8	39.8
Feb. 29	1105	41° 35'	66°00.5'		57	77	52.10	40.0	39.9
Feb. 29	1210	41° 31'	65°59.5'	9	57	79	32.81	40.2	40.2
Feb. 29	1400	41° 20'	66°07.5'		60	82		39.8	39.8
Feb. 29	1500	41°18.5'	66°20.5'		61	84	32.85	40.0	40.0
Feb. 29	1600	41°18.4'			62	85		40.1	40.0
Feb. 29	1700	41°16.5'	66° 391		63	86	32.86	39.8	39.8
Feb. 29	1800	41°15.5'			63	87		39.5	39.5

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 71, February 20-March 2, 1956--Continued

				,					
		Lat-	Longi-		Surface	10-meter	Surf	ace	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
Date	Time	N.	W.	tow	section	section	ity	pera-	ature
							114	ture	
							%	°F.	
					loading 4	loading 4			
Feb. 29	2005	41°13.5'		10	1	1	32.70	39.1	39.1
Feb. 29	2105	41° 14'	67° 10'		3	3		39.2	39.3
Feb. 29	2205	41°12.5'			4	5	32.86	38.8	38.9
Feb. 29	2305	41° 131	67° 351		6	6		38.6	38.8
Mar. 1	0005	41° 12'	67° 45'		7	8	32.77	38.6	38.7
Mar. 1	0100	41°15.4'	67° 56'		8	9		38.1	38.3
Mar. 1	0200	41°16.5'	68° 07'		10	11	32.60	38.8	38.9
Mar. 1	0300	41°17.4¹			11	12 13	32.92	38.9 39.5	38.8 39.4
Mar. 1	0400	41° 18'	67°28.2'		12		32.92		39.4
Mar. 1	0500	41°16.5'			14	15	22 07	39.7 40.3	40.3
Mar. 1	0610	41°15.5'			15 17	17 19	33.07	40.3	40.3
Mar. 1	0705	41° 07' 40° 52'	68°59.51		19	22	32.99	39.4	39.4
Mar. 1	0805 0905	40° 45'	68°57.51		20	23	32.33	39.7	39.8
Mar. 1	1010	40°47.41			22	25	32.56	39.9	39.9
Mar. 1 Mar. 1	1105	40°47.5'			23	27	32.00	39.8	39.8
Mar. 1	1200	40° 47'	68° 17'		25	28	32.48	39.6	39.5
Mar. 1	1300	40°49.71	68°03.81		26	30		39.8	39.7
Mar. 1	1410	40°49.5'			28	32	32,59	40.5	40.5
Mar. 1	1430	40°48.5'	67°43.7'	11	28	32		40.1	40.1
Mar. 1	1600	40°37.7'			31	35	32,78	40.7	40.8
Mar. 1	1705	40 291	67° 56'		33	37		40.9	41.0
Mar. 1	1800	40° 29'	68°08.81		35	38	32.80	40.8	40.7
Mar. 1	1910	40° 27'	68° 221		36	40		40.4	40.4
Mar. 1	2010	40° 27'	68° 34'		38	42	32.64	40.2	40.2
Mar. 1	2105	40° 271	68° 481		40	44		40.3	40.1
Mar. 1	2205	40° 281	69° 001		42	46	32.83	40.1	40.1
Mar. 1	2305	40° 281	69°13.5'		43	48		39.9	39.8
Mar. 2	0005	40°31.51			45	50	32.78	38.3	38.3
Mar. 2	0105	40° 351	69° 37'		47	51		38.6	38.7
Mar. 2	0205	40°38.51			48	53	32.56	37.3	37.4
Mar. 2	0305	40° 401	70° 001		50	55		37.0	37.1
Mar. 2	0405	40° 431	70° 10'		52	57	32.58	37.1	37.1
Mar. 2	0505	40* 451	70° 201		53	58		37.6	36.7
Mar. 2	0605	40° 541	70° 321		55	60	32.37	36.8	36.9
Mar. 2	0705	41° 02'	70° 421		57	63		36.6	36.5
Mar. 2	0805	41° 07'	70° 49¹	1	59	64	31.99	35.5	35.4
Mar. 2	0850	41° 17'	70°52.91	12	60	66		35.1	35.0
		L					L		l

Table 3. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 72, March 21-31, 1956

							Sur	face	
		Lat-	Longi-	4 .	Surface	10-meter		cont.	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
		W.	W.	tow	section	section	ity	pera-	ature
							10,	ture	
									-
					loading 1	loading 1	%	° F .	
Mar. 21	1200	41° 20'	70° 001				31, 54	35.3	
Mar. 21	1300	41° 06'	71° 02'			1		37.0	37.1
Mar. 21	1400	40° 581	71°03.21		2	2	32.47	37.2	37.1
Mar. 21	1505	40° 46'	71° 01'		5	3		38.4	38.4
Mar. 21	1605	40°33.5"			7	5	32.82	39.9	39.9
Mar. 21	17 05	40° 271	71° 021		9	6		40.6	40.5
Mar. 21	1800	40° 19!	71°02.51		11	7	32,87	40.9	40.9
Mar. 21	1900	40° 081	71° 031		12	8		43.8	43.7
Mar. 21	2000	40°02.31	70° 561		15	9		42.4	42.4
Mar. 21	2100	40°01.7'	70°47.71		16	10		43.8	43.8
Mar. 21	2200	40°01.8'	70°37.71		18	11	32, 27	42.9	43.1
Mar. 21	2300	40°01.21	70°23.51	1	20	12		42.8	42.8
Mar. 22	0005	40° 01'	70°13.5'		21	15	33.73	44.6	44.7
Mar. 22	0200	40° 001	70°00.2'		24	16		42.9	43.0
Mar. 22	0310	40° 01'	69° 481		26	17	33, 14	41.6	41.6
Mar. 22	0405	40° 01'	69° 38'		28	17		42.6	42.7
Mar. 22	0505	40° 001	69° 26'		29	18	32,91	40.8	40.9
Mar. 22	0605	39°.581	69° 15'		31	19		47.5	47.4
Mar. 22	07 05	39° 581	69° 03'		33	20	34.95	50.9	50.8
Mar. 22	0805	39° 571	68° 51'		35	21	34.55	50.4	50.5
Mar. 22	0905	39° 571	68° 39'		36	22	34.76	50.3	50.3
Mar. 22	1005	39° 571	68° 27'		38	23		45.9	46.0
Mar. 22	1105	39°56.51	68° 16'	2	40	24	34. 45	48.8	48.9
Mar. 22	1215	39°57.51	68°04.31		41	26		48.0	48.0
Mar. 22	1400	40°04.21			44	27	34.01	46.9	46.9
Mar. 22	1500	40° 091	67° 581		45	28		47.9	47.9
Mar. 22	1605	40° 171	67° 50'		47	30	33, 21	42.1	42.1
Mar. 22	1705	40° 271	67°44.51		49	31		39.9	39.8
Mar. 22	1805	40° 351	67°41.5		50	33	32,61	39.3	39.4
Mar. 22	1905	40°42.5'	67° 37'		52	35		39.2	39.2
Mar. 22	2000	40°54.81	67°32.81		54	37	32.72	39.3	39.3
Mar. 22	2105	41° 05'	67° 27'		56	39		39.3	39.5
Mar. 22	2205	41° 13'	67° 21'		57	40	32, 68	39.2	39.3
Mar. 22	2305	41°19.5'	67° 15'		59	42		39.0	38.9
Mar. 23	0005	41° 27'	67°10.5'	3	61	45	32, 63	38.9	38.9
Mar. 23	0200	41° 391	67° 08'		63	47		38.9	38.9
Mar. 23	0300	41° 491	67°05.61		64	49	32, 54	38.8	38.9
Mar. 23	0405	41° 57'	67° 00¹		66	50		39.3	39.5
Mar. 23	0505	42° 091	66°53.51		68	53	32.67	39.1	39.3
Mar. 23	0605	42° 19'	66° 481		70	55	32.01	37.5	37.7
	07 05	42° 28'	66° 44¹		71	56	32, 42	38.1	38.1
Mar. 23	0705	42° 381	66° 391		73	58	32,42	35.6	36.3
Mar. 23		42°46.5'			74	60	31.76	35.2	35.1
Mar. 23	0905	42° 46.5°	66° 27'		76	61	31.70	35.2	36.0
Mar. 23	1005	42° 54'	66° 22'		77	63	31.70	34.9	34.8
Mar. 23	1100				77	66	31.70	34.7	34.7
Mar. 23	1200	430 091	66° 11' 65°58.5'		81	67	31.56	34.7	34.7
Mar. 23						0 (1 21. 30	1 34.4	04.4
	1300	43° 07'							
Mar. 23	1405	42° 55'	65° 421		83	69	21 54	34.5	33.9
			65° 42' 65°31.2'				31.54		

Table 3.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 72, March 21-31, 1956--Continued

							Sur	face	
Date	Time	Lat- itude W.	Longi- tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	10-meter temper- ature
					loading 2	loading 2	%	° F .	
Mar. 23	1810	43°01.5'	65° 00'		3	6	31.63	33.7	33.7
Mar. 23	1905	43° 001	64° 481		4	7		33.7	33.7
Mar. 23	2000	42° 56'	64° 40'		6	8	31.52	33.3	33.2
Mar. 23	2100	42° 451	64° 391		8	10		33.3	33.1
Mar. 23	2205	42° 35¹	64° 40'		10	12	31.97	33.9	34.0
Mar. 23	2305	42°34.5'	64° 51'		12	13		33.2	33.2
Mar. 24	0005	42° 34'	65° 04¹		13	15	31.69	33.6	33.6
Mar. 24	0100	42°25.71	65° 151		15	16		35.2	35.2
Mar. 24 Mar. 24	0200	42°36.5' 42° 39'	65° 29¹ 65° 44¹		·17	18 20	31.75	35.1	35.1
Mar. 24	0305	42*42.5	66° 00¹		21	21	31.96	35.6 36.1	35.7 36.1
Mar. 24	0505	42°42.5'	66° 12'		22	23	31.90	35.5	35.6
Mar. 24	0605	42°42.5'	66°25.5'		24	24	31.75	34.8	35.0
Mar. 24	07 05	42°43.5'	66°38.5'		25	26		35.3	35.0
Mar. 24	0810	42° 481	66° 551		28	28	32, 36	37.6	37.7
Mar. 24	0910	42° 49'	67° 12'		30	30		36.4	36.5
Mar. 24	1005	42° 491	67°24.5'		31	31	31.78	34.9	34.9
Mar. 24	1105	42° 481	67° 391		33	33		37.7	37.5
Mar. 24	1205	42° 481	67° 511	5	36	36	32.31	37.7	37.8
Mar. 24	1400	42° 48'	68° 121		38	38		37.9	38.0
Mar. 24	1500	42°48.71	68° 26¹		40	40	32.36	37.7	37.7
Mar. 24	1600	42°47.5'	68°41.5'		42	42		38.1	
Mar. 24	17 00	42° 47'	68°54.31		44	43	32.45	38.0	
Mar. 24	1800	42° 45'	69° 07'		45	45		38.1	
Mar. 24	1900	42° 43'	69° 201		47	46	32.43	37.9	
Mar. 26	0945	42° 34'	70° 23¹	6	55	62	32.50	37.7	37.7
Mar. 26	1100	42° 25'	70° 221		62	63		36.5	36.5
Mar. 26	1205	42° 14'	70° 17'		64	66	32.21	36.0	36.0
Mar. 26	1300	42°09.51	70° 081		66	67		37.2	37.3
Mar. 26	1400	42° 04¹	69° 521		68	69	32.48	38.2	38.1
Mar. 26	1500	42° 03¹	69° 391		70	71		39.1	39.1
Mar. 26	1605	42° 03¹	69° 24'		72	73	32.66	38.7	38.8
Mar. 26 Mar. 26	1705	42° 05¹ 42° 05¹	69°10.5' 68° 55'		74	7.5		39.4	39.4
Mar. 26	1905	42°05.5'	68° 42'		76 77	77	32.73	38.7	38.7
Mar. 26	2005	42° 05¹	68°27.51		79	79 80	32.70	38.5 38.9	38.6
Mar. 26	2105	42° 06¹	68° 16¹		81	82	34.70	39.3	39.4
Mar. 26	2205	42° 081	68°02.51		83	84	32, 93	40.0	40.0
Mar. 26	2305	42° 07¹	67° 491		85	86	32.33	38.0	38.0
Mar. 27	0005	42°07.51	67°34.2'	7	86	87	32, 69	38.8	39.4
	0000	12 00	01 01.5		loading 3	loading 3	02.00	00.0	00.1
Mar. 27	0210	42°06.51	67°13.51		3	3		39.0	39.1
Mar. 27	0300	42°04.2'	67° 021		5	5	32, 67	38.9	39.2
Mar. 27	0400	42°02.51	66° 461		7	7		38.9	39.0
Mar. 27	0505	42° 04'	66° 351		9	9	32.74	39.2	39.2
Mar. 27	0605	42° 031	66°23.51		11	10		39.7	39.7
Mar. 27	07 05	42° 021	66° 11'		13	12	32.76	39.3	39.4
Mar. 27	0810	42°02.51	65° 571		15	14		36.0	35.9
Mar. 27	0905	42°03.51	66° 461		16	15	31.89	33.9	33.9

Table 3. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 72, March 21-31, 1956--Continued

					<i>a</i> .		Sur	face	
D .	m.	Lat-	Longi-	1-meter	Surface	10-meter			10-meter
Date	Time	itude W.	tude W.	tow	gauze section	gauze	Salin-	Tem-	temper-
		W .	٧٧ .		section	section	ity	pera-	ature
_								ture	
							%,,	°F.	
			0.50.001		10	4.7			
Mar. 27	1005	42° 05'	65° 321		18	17		33.8	33.7 33.8
Mar. 27	1100	42° 06'	65° 20'		20 23	19	31.94	33.9 35.8	35.8
Mar. 27	1215	42° 08' 42°14.5'	65° 051		25	21 22	31.78	34.3	34.3
Mar. 27	1300 1400	42°14.5°	65°05.51		26	24	31.70	34.0	34.0
Mar. 27 Mar. 27	1500	42°30.71	65° 06'	8	29	27	31.73	34.0	34.0
Mar. 27	1605	42° 36'	65° 04'		30	28		34.6	34.6
Mar. 27	1705	42° 43'	65° 06'		31	29	31.70	34.5	34.5
Mar. 27	1805	42°52.2'	65° 101		33	31		34.5	34.4
Mar. 27	1905	42°52.2'	65° 221		35	32	31.58	33,6	33,6
Mar. 27	2005	42° 511	65° 371		36	34		33.5	33.5
Mar. 27	2105	42° 531	65°51.51		38	35	31.56	33.6	33.5
Mar. 27	2205	42° 521	66° 041		40	37		34.3	34.3
Mar. 27	2305	42°50.51	66° 12'		41	38	31.84	35.3	35.3
Mar. 28	0005	42°40.51	66°08.21		43	40		35.6	35.5
Mar. 28	0105	42° 30'	66°05.21		45	42	31.92	35.6	35.6
Mar. 28	0205	42° 18'	66°021		47	44		35.4	35.5
Mar. 28	0300	42°07.21	65° 581		49	46	32.09	35.5	35.5
Mar. 28	0405	41° 54'	65° 53'		51	48	00.40	37.6	37.5
Mar. 28	0505	41°45.51	65° 541		53	49	32.43	37.6 39.4	37.6 39.4
Mar. 28	0605	41° 44'	66°08.51		55	51 52	32.66	38.8	38.7
Mar. 28	07 05	41° 43¹	66° 21'		57 58	54	32.00	39.2	39.3
Mar. 28	0805	41° 46' 41° 49'	66°35.5'		60	55	32.80	39.3	39.3
Mar. 28	0905	41° 51'	67° 02'		62	57		38.7	38.7
Mar. 28 Mar. 28	1005	41 51'	67° 16'		64	58	32.64	38.7	38.8
Mar. 28	1200	41° 50'	67° 231	9	65	59		38.7	38.7
Mar. 28	1400	41°45.5'	67°40.51		67	64	32, 85	39.0	39.3
Mar. 28	1530	41°46.5'	67°50.3'		69	66		39.1	39.9
Mar. 28	1605	41°45.5'	67° 591		70	68	32.90	39.6	39.7
Mar. 28	1705	41°46.5'	68° 121		73	69		39.6	39.7
Mar. 28	1805	41° 47'	68°34.5'		74	71	32.97	39.8	39.9
Mar. 28	1905	41*48.51	68° 40'		76	73		39.1	39.0
Mar. 28	2005	41°47.5'	68°50.51		78	74	32.83	39.3	39.3
Mar. 28	2105	41° 47'	69° 01'		79	76		39.2	39.2
Mar. 28	2205	41° 46°	69°16.5'		81	77	32,66	38.7	38.7
Mar. 28	2305	41° 45¹	69° 31'		83	79		38.2	38.2
Mar. 28	2400	41°48.7'	69°47.2'	1	85	82	32.50	37.9	37.9
Mar. 29	0100	41°40.3¹	69° 41'		86	83	22 46	37.0 37.3	37.3
Mar. 29	0200	41° 33'	69°33.8'		88	85 86	32.46	38.2	38.2
Mar. 29	0300	41° 29'	69°21.8'		90	88		38.1	38.3
Mar. 29	0410	41° 27 ¹	69°06.51	10	loading 4			30.1	00.0
Mar. 29	0605	41°24.3'	68° 491		3	3	33, 02	40.1	40.3
Mar. 29	07 05	41° 26'	68° 36¹		5	4	33.02	40.1	40.1
Mar. 29	0805	41° 26'	68° 26'		6	5	32,73	38.9	38.8
Mar. 29	0900	41° 26'	68° 14'		8	7		38.8	38.8
Mar. 29	1000	41° 26'	68°01.3		9	8	32.69	38.8	38.8
Mar. 29	1100	41°29,5			11	10		38.8	38.8
Mar. 29	1200	41°32.5°	0.00		13	11	32, 65	38.9	38.8
11101. 20	1200	21 02.0	01 00		1	1	32.30	1	1

Table 3. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 72, March 21-31, 1956--Continued

							Surf	ace	
		Lat-	Longi-	l-meter	Surface	10-meter		Tem-	10-meter
Date	Time	itude	tude	tow	gauze	gauze	Salin-	pera-	temper-
		W.	W.		section	section	ity	ture	ature
							%	° F.	
Mar. 29	1300	41° 30'	67° 19'		15	13	700	39.0	38.5
Mar. 29	1400	41° 30'	67°02.51		17	15	32,55	39.7	39, 1
Mar. 29	1500	41°26.5'	66° 45'		19	17		38.4	38.2
Mar. 29	1605	41°24.5'	66° 27'	11	21	18	32.64	39.4	38.8
Mar. 29	1705	41° 23'	66° 18'		23	21		37.1	36.9
Mar. 29	1805	41° 21'	66° 041		25	23	33. 36	42.3	43.4
Mar. 29	1905	41° 14'	66°15.51		27	25		39.7	39.9
Mar. 29	2005	41° 07'	66°25.51		29	27	32.50	38.2	38.5
Mar. 29	2105	41° 04'	66° 38'		31	29		37.5	37.5
Mar. 29	2205	41° 04'	66° 52'		33	31	32.52	38.9	38.7
Mar. 29	2300	41° 04'	66° 07'		35	33		39.0	38.5
Mar. 30	0005	41° 02'	67°17.5'		37	35	32.53	39.3	39.1
Mar. 30	0100	40° 54'	67°18.3'		38	37	20 51	39.0 38.8	38.8
Mar. 30	0200	40°45.81	67° 13'		41	39 41	32.51	38.9	38.9
Mar. 30	0300	40°45.8'	66° 47'		45	43	32, 87	40.0	40.1
Mar. 30	0405	40° 45¹ 40° 40¹	66° 541		46	44	32.01	41.5	41.5
Mar. 30 Mar. 30	0505	40° 341	67° 051		48	46	32.57	39.1	39.0
Mar. 30	07 05	40° 25'	67° 15'		50	48		39.6	39.5
Mar. 30	0805	40° 31'	67° 24'		52	49	32,68	39.1	39.1
Mar. 30	0900	40°37.5'	67°32.3'		54	51		38.7	38.7
Mar. 30	1000	40° 46'	67°43.81		56	53	32,63	39.5	39.5
Mar. 30	1105	40° 541	67°54.51		58	55		39.5	39.3
Mar. 30	1215	41° 05'	68°03.81	12	61	56	32.76	39.2	39.1
Mar. 30	1400	40° 58'	68°13.51		62	60		39.4	39.4
Mar. 30	1500	40*51.31			63	61	32.79	39.6	39.6
Mar. 30	1605	40° 46'	68° 30'		65	63		39.6	39.7
Mar. 30	1705	40° 391	68° 391		67	64	32.80	39.5	39.5
Mar. 30	1805	40° 321	68°50.51		69	67	1	39.4	39.4
Mar. 30	1905	40° 26'	68°57.51		71	68	32.64	39.5	39.6
Mar. 30	2005	40° 30¹	69° 06'	13	73	69	20.75	39.7	39.6
Mar. 30	2100	40°36.5'			74	71	32.75	38.7	38.7
Mar. 30	2200	40°43.5'			76 78	73	32,60	37.9	38.0
Mar. 30	2300	40°51.3'	69° 421		78	77	32.00	38.0	38.2
Mar. 31	0005	40 31	09 42		loading 5	loading 5		00.0	00.2
Mar. 31	0200	40° 45¹	69°48.5		74	78	32.80	39.0	39.0
Mar. 31	0300	40°38.51	69°55.5		75	79		39.2	39.3
Mar. 31	0405	40°30.51			77	81	32.95	39.4	39.4
Mar. 31	0505	40° 27'	70°12.5		79	82		40.0	40.1
Mar. 31	0605	40° 34'	70° 20'		81	83	32.76	39.9	40.0
Mar. 31	07 05	40° 43'	70°28.5		83	85	22.76	39.6	39.7
Mar. 31	0805	40° 50'	70° 34'		84	86	32.76		38.8
Mar. 31		40°56.5			86	87		38.1	37.5
Mar. 31		41° 05'	70°46.5		87	88	32.41	37.5	36.7
Mar. 31	1125	41°28.5	10- 56	14	89	90		30.0	30.1
			I			1	1		

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 73,

April 17-28, 1956

		Lat-	Longi-	1	Surface	10-meter	Sur	face	10-meter
Date	Time	itude N.	tude W.	l-meter tow	gauze section	gauze section	Salin- ity	Tem- pera- ture	temper- ature
							0.		
							%	° F.	
Apr. 17	1040	41°17.41	71° 00'		1	1	32.12	40.1	40.0
Apr. 17	1200	41°07.31	71° 00¹		2	3		40.3	40.6
Apr. 17	1300	40°58.51	70°59.31		3	4	32.62	41.3	41.3
Apr. 17	1400	40°48.7'	71° 00'		. 5	6		41.6	41.1
Apr. 17	1500	40°38.8'	71° 00'		7	8	32.81	41.9	41.8
Apr. 17	1605	40°30.4'	71°00.2'		8	9		42.4	42.1
Apr. 17	1705	40°20.6'	71°00.4'		10	11	33. 18	44.2	44.3
Apr. 17	1805	40° 131	71°00.8'		11	12		44.7	44.4
Apr. 17	1905	40°02.51	70°59.6'		13	14	33.88	46.9	45.8
Apr. 17	2000	40°00.51	70° 51'		14	15		41.4	41.2
Apr. 17	2100	40° 00¹	70° 391		16	16	33.21	44.5	44.4
Apr. 17	2200	40°00.51	70°25.51		18	18		44.6	44.8
Apr. 17	2300	40°00.51	70° 13'		19	20	33.37	44.8	45.0
Apr. 18	0000	40° 01'	69°58.51	1	21	21		45.0	47.1
Apr. 18	0200	40°01.5'	69°42.61		25	26	32.61	41.5	41.5
Apr. 18	0300	40°01.5'	69°28.5'		28	28		41.8	41.7
Apr. 18	0405	40°01.5'	69°15.31		29	30	32.60	41.4	41.5
Apr. 18	0505	40°00.51	69°02.31		31	31		43.9	44.0
Apr. 18	0605	40° 001	68°49.51		33	33	34.06	48.2	48.6
Apr. 18	07 05	40° 00'	68°35.21		36	35		46.6	46.8
Apr. 18	0800	40° 001	68° 221		38	37	34.03	47.8	47.8
Apr. 18	0900	40° 00'	68°10.51		39	38		49.9	49.6
Apr. 18	1000	40° 00¹	68° 001		41	39	34.91	52.4	52.3
Apr. 18	1100	40°11.7'	67°54.31		43	41		53.5	53.5
Apr. 18	1215	40° 21'	67°49.51	2	47	43	33.08	44.9	45.9
Apr. 18	1400	40°36.51	67°44.1'		50	48		41.8	41.6
Apr. 18	1500	40°45.91	67°40.21		51	50	32.50	41.6	41.3
Apr. 18	1605	40°56.91	67°34.91		54	52		42.4	42.0
Apr. 18	1705	41°06.41	67° 281		56	54	32.55	41.1	39.7
Apr. 18	1805	41°16.71	67°21.8'		58	56		40,6	40.4
Apr. 18	1905	41°25.3'	67°13.6'		60	58	32, 59	40.6	40.7
Apr. 18	2000	41°33.71	67°09.31		62	59		40.4	40.3
Apr. 18	2100	41° 44'	67°05,31		64	61	32.64	40.5	40.4
Apr. 18	2200	41°52.71	67°01.7'		65	63		40.4	40.5
Apr. 18	2300	42°00.71	66° 571		67	65	32.60	40.1	40.1
Apr. 19	0005	42°08.71	66°51.3'	3	70	66		41.3	41.2
Apr. 19	0205	42° 231	66° 441		72	71	31,99	39.4	39.1
Apr. 19	0305	42° 341	66° 40¹		74	72		39.6	39.3
Apr. 19	0405	42° 441	66°36.91		76	74	31.69	37.0	37.0
Apr. 19	0505	42° 541	66°32.51		78	76		36.7	36.2
Apr. 19	0605	43° 04'	66°28.51		79	77	31.74	36.7	36.6
Apr. 19	07 05	43° 12'	66° 25'		81	79		37.8	37.8
Apr. 19	0805	43°22.91	66°20,41		83	81	31.63	35.9	35.7
Apr. 19	0900	43° 321	66°23.51		85	83		36.1	35.7
Apr. 19	1000	43° 40'	66°33.8'		87	84	31,92	37.3	37.1
Apr. 19	1100	43°47.51	66°42.5'		88	86		37.9	37.8
Apr. 19	1205	43°58,21	66° 531	4	90	87	31.98	37.9	38,0
					loading 2	loading 2	22,00		
1- 10	1400	43°55.31	67°04.1'		2	3		38.9	38.8
Apr. 19									

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 73, April 17-28, 1956--Continued

		T		T	1	1	Sur	face	
		Lat-	Longi-		Surface	10-meter		lace	10-meter
Date	Time	itude	tude	1-meter				Tem -	
Date	Time	1		tow	gauze	gauze	Salin-	pera-	temper-
		N.	W.		section	section	ity	ture	ature
								ture	
								ì	1
	1				1		%	°F.	
Apr. 19	1605	43°52,3'	67°29.51		6	6		41.1	39.3
Apr. 19	1705	43°51.81	67° 44'		8	8	32.03	38.9	38.3
Apr. 19	1805	43°50.41			10	10		39.8	39.3
Apr. 19	1905	43°48.4'			12	11	32.21	39.7	38.4
Apr. 19	2000	43°46.5'	68°25.5'		13	13		39.9	39.9
Apr. 19	2100	43°44.5'	68° 40'		15	15	E .		
Apr. 19	2200	43°42.2'	68°54.8'				32, 03	38.2	37.4
					17	17		38.5	38.0
Apr. 19	2300	43° 40'	69°08.8'		19	19	32.31	39.3	38.5
Apr. 20	0005	43°38.2'	69° 19'	5	20	20		40.0	37.5
Apr. 20	0205	43°34.7'	69°43.8'		24	25	25.27	40.1	36.9
Apr. 20	0305	43°31.1'	69°58.7'		26	26		39.9	37.0
Apr. 20	0405	43°22.5'	70°07.71		28	29	30.17	40.9	38.9
Apr. 20	0505	43° 15'	70°15.3'		30	30		41.1	40.3
Apr. 20	0605	43°06.7'	70°23.8'		32	32	30, 47	40.8	38.9
Apr. 20	07 05	42°59.5'	70° 28'		33	34		40.5	39.8
Apr. 20	0800	42°58.71	70°15.31		35	36	31.59	41.3	39.5
Apr. 20	0900	42°58.31	70° 001		37	38		39.9	39.7
Apr. 20	1000	42°57.31	69° 461		39	40	32.42	41.2	40.0
Apr. 20	1100	42° 571	69° 30'		41	42		41.0	39.5
Apr. 20	1205	42° 561	69°17.5'	6	42	43	32.31	41.1	39.8
Apr. 20	1420	42° 531	68° 52'		47	48		42.5	39.9
Apr. 20	1500	42°51.7'	68°45.5'		48	49	32,23	41.0	39.5
Apr. 20	1605	42°49.6'	68°30.3'		50	51	52.25	41.2	40.0
Apr. 20	1705	42°49.7'	68°16.3'		52	53	32.38	41.8	41.0
Apr. 20	1805	42°48.8'	68°03.21		53	54		41.1	40.4
Apr. 20	1905	42°49.8'	67° 49'		55	56	32.24		
Apr. 20	2000	42°50.71	67°36.2'		57	58		40.4	40.2
Apr. 20	2100	42°51.2'	67°21.7'		59		00 11	40.2	40.3
Apr. 20	2200	42°51.7'	67°07.8'			60	32.11	40.2	39.8
Apr. 20	2305	42°52.2'			61	62		38.8	39.4
Apr. 21	0005	42°52.8'	66°52.5¹ 66°38.2¹	7	63	64	32.22	39.8	40.0
		42 52.8			64	67		37.6	37.5
Apr. 21	0210		66° 00'		68	69	31.77	36.5	36.2
Apr. 21	0310	42°53.1'	66°02.8'		70	71		36.3	36.0
Apr. 21	0420	42°53.3'	65° 46'	~-	72	73	31.94	36.3	36.3
Apr. 21	0500	42°52.2'	65°37.51		74	75		36.2	36.1
Apr. 21	0605	42°48.7'	65°25.8'		75	76	31.56	34.9	34.7
Apr. 21	07 05	42°43.71	65°12.2'		76	78		36.0	36.0
Apr. 21	0800	42° 38'	65°01.5'		78	80	31.56	34.8	34.8
Apr. 21	0900	42°26.61	65°03.71		81	82		37.9	37.9
Apr. 21	1000	42°15.5'	65°05.51		82	84	31.86	36.6	36.6
Apr. 21	1100	42°05'	65°10.2'		84	86		38,2	38.3
Apr. 21	1200	42°00.81	65°21.2'	8	86	88	32,01	37,2	37.2
					loading 3	loading 3			
Apr. 21	1400	42° 00'	65°34.51		2	3		38.5	38.4
Apr. 21	1500	42°01.61	65°48.6'		4	4	31.81	37.1	37.1
Apr. 21	1605	42°01.51	66° 01'		6	6		37.7	37.6
Apr. 21	17 05	42°01.2'	66°13.1'		8	8	32, 22	39.0	39.0
Apr. 21	1805	42°02.6'	66°25.21		9	9	32.22	41.0	41.0
Apr. 21	1905	42° 03'	66° 371		11	11	32.60		
Apr. 21	2000				13	12	-	40.1	40.2
	_000	13 00.4	00 ±0.0.1		13	12		40.4	40.5

Table 4, --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 73,

April 17-28, 1956--Continued

Date Time N. W. 1-meter tow section Salin- Time titure N. M. M. M. M. M. M. M.			Lob	I amai		Sfa	10	Sur	face	10
Apr. 21 2100 42°04.7 67°00 14 14 32.61 40.4 40.5 Apr. 21 2200 42°05.5 67°10 16 15 41.4 41.5 Apr. 21 2300 41°58.4 67°20 17 17 32.79 41.6 41.6 41.8 Apr. 22 0205 41°57.6 67°52.7 22 22 32.62 41.6 41.8 Apr. 22 0305 41°58.8 68°05.2 24 24 24 40.9 40.9 Apr. 22 0405 41°59.5 68°17.5 26 26 32.59 41.0 39.9 Apr. 22 0505 42°01.3 68°40.5 28 28 28 28 29 41.5 41.5 41.5 Apr. 22 0605 42°01.3 68°40.5 29 29 32.62 41.5 41.5 41.5 Apr. 22 0805 42°01.3 68°40.5 28 28 32.59 41.0 39.9 Apr. 22 0805 42°01.3 68°40.5 29 29 32.62 41.5 41.5 41.5 Apr. 22 0805 42°01.3 68°40.5 32 33 31 41.4	Date	Time	Lat-	Longi-	1-meter	Surface	10-meter		Tem-	10-meter
Apr. 21 2100	Date	1 11110			tow					
Apr. 21 2100								ıty	ture	
Apr. 21 2100								9/00	° F.	
Apr. 21 2300 41*58.41 67*20! 17 17 17 32.79 41.6 41.8 Apr. 22 0005 41*57.61 67*52.71 9 20 20 32. 32.62 41.6 41.8 Apr. 22 0005 41*57.61 67*52.71 22 22 22 32.62 41.6 41.6 41.8 Apr. 22 0305 41*58.81 68*05.21 24 24 24 40.9 40.9 Apr. 22 0405 41*59.51 68*17.51 26 26 26 32.59 41.0 39.9 Apr. 22 0505 42*01.31 68*640.51 29 29 29 32.62 41.5 41.5 41.5 Apr. 22 0605 42*01.31 68*640.51 29 29 29 32.62 41.5 41.4 Apr. 22 0705 42*02.71 68*51.51 31 31 31 31 32.62 41.5 41.4 Apr. 22 0705 42*02.71 68*51.51 32 33 32.49 40.3 40.2 Apr. 22 0900 42*06.81 69*04.51 32 33 33 32.49 40.3 40.2 Apr. 22 1000 42*06.81 69*04.51 36 36 36 32.40 40.3 40.1 Apr. 22 1100 42*06.81 69*08.51 37 38 32 41.0 40.2 Apr. 22 1100 42*06.81 69*381 37 38 32 40.6 40.1 Apr. 22 1100 42*08.81 69*381 37 38 32 40.6 40.1 Apr. 22 1100 42*08.81 69*381 37 38 32 40.6 40.1 Apr. 22 1105 42*141 69*46.11 10 40 39 32 32.64 41.8 41.7 Apr. 22 1105 42*141 69*46.11 10 40 39 32 32.64 41.8 41.7 Apr. 22 1105 42*201 69*59.51 41 42 40.5 40.5 Apr. 22 1705 42*30.51 70*14.51 45 46 48 29.75 41.7 40.5 Apr. 22 1705 42*30.51 70*14.51 45 46 48 29.75 41.7 40.5 Apr. 22 1705 42*30.51 70*14.51 46 48 29.75 41.7 40.5 Apr. 22 1705 42*31.41 70*27.51 46 48 48 29.75 41.7 40.5 Apr. 22 1705 42*31.41 70*27.51 46 48 48 29.75 41.7 40.5 Apr. 22 1705 42*31.41 70*27.51 46 48 48 29.75 41.7 40.5 Apr. 22 1705 42*4.51 70*26.61 50 52 30.71 42.1 41.0 Apr. 22 3000 42*16.71 70*171 51 54 56 38 39.7 39.8 Apr. 23 3005 41*31.44 69*351 57 59 31.98 40.1 40.1 39.9 Apr. 23 3005 41*31.44 69*351 57 59 31.98 40.1 40.1 39.9 Apr. 23 3005 41*31.44 69*351 57 59 59 31.98 40.1 40.1 40.1 Apr. 23 3005 41*31.44 69*351 57 59 59 31.98 40.1 40.1 40.1 Apr. 23 3005 41*31.44 69*351 57 59 59 31.98 40.1 40.1 40.1 Apr. 23 3005 41*31.44 69*351 57 59 59 31.98 40.1 40.1 40.1 Apr. 23 3005 41*31.44 69*351 57 59 59 31.98 40.1 40.1 40.1 Apr. 23 3005 41*31.44 68*41 70 70 73 74 77 77 77 77 77 77 77 77 77 77 77 77							14	32.61		40.5
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Apr. 23										
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Apr. 23		0305	41°32.7'			66	69			
Apr. 23 0605		0405		69°07.31		68	71			
Apr. 23 0800 41°37,5' 68°30,3' 73 76 77 32,74 41.7 41.6 Apr. 23 0900 41°28,5' 67°55,5' 78 81 32.70 42.1 41.6 Apr. 23 1100 41°28' 67°40,5' 80 83 42.0 41.8 Apr. 23 1215 41°25,4' 67°21,8' 12 82 85 , 32.62 41.9 41.7 Apr. 23 1510 41°28' 66°58' 4 4 4 32.65 41.2 41.2 Apr. 23 1605 41°31,7' 66°47' 5 5 40.1 40.1 Apr. 23 1805 41°33,2' 66°34,3' 7 7 32.42 39.6 39.6 Apr. 23 1905 41°33,2' 66°23' 8 8 8 8 40.0 40.0 Apr. 23 1905 41°33,3' 66°11' 10 10 32.27 39.0 39.0 Apr. 23 2000 41°31,4' 65°57' 12 12 39.1 38.9 Apr. 24 0605 41°0,5' 66°12,4' 17 16 33.65 45.6 46.0 Apr. 24 0705 41°0,5' 66°12,4' 19 17 40.5 40.5		0505	41°35.5'	68°52.5'		70	73		41.0	39.8
Apr. 23 0800 41° 32' 68° 20' 74 77 32.74 41.7 41.5 Apr. 23 0900 41°27.8' 68°09.3' 76 79 41.9 41.9 Apr. 23 1000 41°28' 67°55.5' 80 83 42.0 41.8 Apr. 23 1215 41°25.4' 67°21.8' 12 82 85 , 32.62 41.9 41.7 Apr. 23 1410 41°25.2' 67° 09' 80 83 42.0 41.8 Apr. 23 1510 41° 28' 66° 58' 4 4 32.65 41.2 41.2 Apr. 23 1605 41°31.7' 66° 47' 5 5 40.1 40.1 Apr. 23 1705 41°32.2' 66°34.3' 7 7 32.42 39.6 39.6 Apr. 23 1905 41°33.3' 66° 11' 10 10 32.27 39.0 39.0 Apr. 23 2000 41°31.4' 65° 57' 12 12 39.1 38.9 Apr. 24 0605 41°09.5' 66°12.4' 17 16 33.65 45.6 46.0 Apr. 24 0705 41°04.2' 66°21.3' 19 17 40.5 40.5								32.53	40.9	40.8
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Apr. 24 0605 41°09.5 66°12.4 17 16 33.65 45.6 46.0 46.7 47°04.2 66°21.3 19 17 40.5 40.5		1905	41°33.3°	66° 11'		10		32.27	39.0	39.0
Apr. 24 0705 41°04.21 66°21.31 19 17 40.5 40.5										38.9
								33.65		
								1		
	Apr. 24	0805	41°01.2	66°32.51		20	19	32.31	39.2	39.2
Apr. 24 0900 41°00.7' 66°45.5' 22 21 39.8 39.7	Apr. 24	0900	41°00.7	66°45.51		22	21		39.8	39.7

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 73, April 17-28, 1956--Continued

				•					
							Sur	face	
		Lat-	Longi -		Surface	10-meter			10-meter
Date	Time	itude	tude	1-meter	gauze	gauze		Tem-	
Date	1 111116			tow			Salin-	pera-	temper-
		N.	W.		section	section	ity	ture	ature
								ture	
	-								
	ĺ	i .		i i			%	° F.	1
	1						/00		10.1
Apr. 24	1000	41°00.6'	66° 57'		23	22	32.37	40.0	40.1
Apr. 24	1105	41°00.5'	67°09.31		25	24		40.3	40.3
Apr. 24	1205	40°59.4'	67°21.7'	13	28	25	32.53	40.1	40.0
Apr. 24	1410	40° 561	67°38.7'		30	29		41.4	41.2
Apr. 24	1505	40°56.91	67° 52'	!	31	30	32.58	41.5	41.6
Apr. 24	1605	40°58.21	68°06.31		33	32		42.0	41.9
Apr. 24	1705	41°00.81	68° 20'		35	34	32,69	41.8	41.8
		41°01.8¹	68° 341		37	36	32.00	41.9	41.9
Apr. 24	1805						1		41.4
Apr. 24	1905	41° 03'	68°46.8'		38	38	32.75	41.4	
Apr. 24	2000	41°03.5'	69° 001		40	40		40.5	40.4
Apr. 24	2100	41°02.3'	69°10.81		41	41	32.52	40.5	40.5
Apr. 24	2200	40°55.81	69° 14'		42	43		40.5	40.4
Apr. 24	2300	40° 48'	69°08.21		44	45	32.53	40.7	40.7
Apr. 25	0005	40°36.21	69°02.31	14	45	46		41.2	41.2
Apr. 25	0210	40°29.51	68°43.0'		54	51	32.63	41.1	41.1
Apr. 25	0310	40°29.01	68°29.0'		56	52		40.8	40.8
Apr. 25	0405	40°28.3'	68°18.0'		58	54	32.54	40.8	40.8
	0505	40°29.8'	68°06.0'		60	56		38.9	38.9
Apr. 25				t l		5 7	32.29	39.4	39.4
Apr. 25	0605	40°31.4'	67°53.5'		61				
Apr. 25	0705	40°33.5'	67°42.5'		63	59		39.2	39.2
Apr. 25	0805	40°33.1'	67°29.51		65	60	32.30	39.7	39.7
Apr. 25	0900	40°32.3'	67° 18'		66	62		41.9	41.9
Apr. 25	1000	40°31.4'	67° 041		68	64	33.58	46.2	46.3
Apr. 25	1100	40° 37'	66° 561		70	65		45.6	45.4
Apr. 25	1205	40°47.21	66°56.21	15	71	66	32.38	39.8	39.7
Apr. 25	1405	40°59.71	66° 431	1 11	76	71		40.2	40.0
Apr. 25	1505	41° 07'	66°36.21		78	73	32.48	40.3	40.2
Apr. 25	1605	41° 13'	66°28.2'		79	75	7-	40.5	40.5
	1705	41°20.5'	66° 23'		80	76	32, 52	40.0	40.0
Apr. 25									40.0
Apr. 25	1805	41°27.8'	66°17.6'		82	78		40.0	
Apr. 25	1905	41°37'	66°12.8'		84	80	32.51	39.2	39.2
Apr. 25	2005	41° 45'	66° 081		85	81		40.6	40.5
Apr. 25	2100	41°56'	66° 031		87	84	32.02	37.7	37.8
Apr. 25	2200	42°04.3'	65° 541		89	86		39.3	39.5
Apr. 25	2300	42°13.7'	65°46.61		91	88	32.29	38.6	39.1
Apr. 26	0005	42°21.3'	65°35.1'	16	92	89		36.5	36.5
F0					loading 5	loading 5			
Apr. 26	0205	42° 30¹	65°28.81		8	2	31.63	35.4	35.2
Apr. 26	0305	42° 391	65° 23'		10	4		35.9	35.8
		42°48.51	65° 17'		11	6	31.60	34.5	34.6
Apr. 26	0405						31.00		
Apr. 26	0505	42°57.51	65°11.5'		13	8		34.7	34.5
Apr. 26	0605	42°55.51	65° 20'		14	9	31.62	34.6	20.0
Apr. 26	07 05	42° 51'	65°33.3'		16	11		36.6	36.6
Apr. 26	0805	42° 45'	65*45.51		18	13	31.96	39.9	36.9
Apr. 26	0900	42*43.5	66*00.31		19	15		36.9	36.6
Apr. 26	1000	42° 40'	66*14.51		21	17	31.92	37.1	36.9
Apr. 26	1100	42°33.51			22	19		37.1	36.7
Apr. 26	1205	42°23.3	66*38.6	17	25	20	31.86	36.7	36.2
Apr. 26	1405	42°19.8'			27	24		40.2	40.2
	1505	42 21.3			29	26	31.85	36.6	36.6
Apr. 26							31.85		
Apr. 26	1605	42 22.5	66° 27'		31	29		36.8	36.7

Table 4.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 73, April 17-28, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Surfa	ace	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze		Tem-	temper-
Date		N.	w.	tow	section	section	Salin-	pera-	ature
					000000	300000	ity	ture	ature
								• • • • • • • • • • • • • • • • • • • •	ļ
							0,		
							%	° F.	
Apr. 26	1705	42°23.7'	66° 12'		33	31	32.46	39.1	39.2
Apr. 26	1805	42°22.51	66°57.5'		34	33		36.7	36.4
Apr. 26	1905	42°20.8'	65° 45'		36	35	32.01	37.3	37.4
Apr. 26	2005	42°19.3'	65° 35'		37	36		36.9	36.7
Apr. 26	2100	42°14.3'	65°29.6'		38	37	32.19	38.3	38.1
Apr. 26	2200	42°04.31	65° 29'		40	39		38.7	38.6
Apr. 26	2300	41°55.5'	65° 291		42	41	32.59	38.7	39.3
Apr. 27	0000	41°46.5'	65°30.4'		43	42		38.4	38.5
Apr. 27	0110	41° 47'	65° 44'		45	45	32.56	39.7	39.5
Apr. 27	0205	41°47.5'	65°56.81		47	46		39.3	39.2
Apr. 27	0305	41°45.71	66°08.31		48	48	32.52	40.2	40.4
Apr. 27	0405	41°44.6'	66°19.9¹		50 52	49	32.58	40.1	40.1
Apr. 27	0505	41°43.21	66°33.6¹			51	32.38	40.6	40.6
Apr. 27	07 05	41°42.3' 41°44.4'	66° 48' 67° 02'		53	53		41.3	41.3
Apr. 27 Apr. 27	0800 0905	41°44.4°	67°15.2'		55 57	55 57	32.77	41.7 41.8	41.4
Apr. 27	1000	41 47.2	67° 10'		58	58	32.66	41.8	41.3
Apr. 27	1100	41° 40.5°	67° 001		60	60	32.00	41.4	39.9
Apr. 27	1205	41°26.8'		18	60	61	32,62	41.1	39.8
Apr. 27	1405	41° 12'	66°44.7'	10	64	66	32.02	40.2	40.0
Apr. 27	1505	41°03.31	66°41.1'		66	67	32.36	39.7	39.2
Apr. 27	1605	40°52.4'		j []	68	69	32.30	44.0	44.1
Apr. 27	17 05	40°44.5'	66° 30¹		69	71	33. 41	45.7	45.7
Apr. 27	1805	40°44.8'			72	73		46.8	47.0
Apr. 27	1905	40°43.71	66°56.21		73	74	32, 36	39.7	39.8
Apr. 27	2000	40°43.8'	67°09.5'		75	76		40.8	41.1
Apr. 27	2100	40° 451	67° 24'		77	78	32.37	40.7	40.1
Apr. 27	2200	40° 461	67°37.7'		79	79		40.8	41.6
Apr. 27	2300	40°45.3'	67°50.61		80	81	32, 54	40.9	41.2
Apr. 28	0005	40°44.5'	68°05.8'	19	83	82		40.6	40.5
Apr. 28	0200	40°43.4'	68°27.5'		85	85	32,62	41.5	41.5
Apr. 28	0310	40° 421	68°40.21		87	87		41.8	41.8
Apr. 28	0405	40°41.1'	68°53.71		88	88	32.73	41.5	41.4
Apr. 28	0505	40°40.81	69°07.51		90	90		40.9	40.9
Apr. 28	0605	40°42.31	69° 21'		92	91	32.48	40.3	41.2
Apr. 28	0705	40° 45'	69°35.91		93	93		41.9	41.8
Apr. 28	0800	40°45.81	69°48.91		95	94	32.26	42.3	42.4
Apr. 28	0900	40°47.91	70° 021		96	96		42.5	41.9
Apr. 28	1000	40°54.2'	70° 13'		98	98	32.31	42.4	42.4
Apr. 28	1100	40°59.51	70°23.51		99	99		41.9	41.8
Apr. 28	1200	41°04.4'	70°34.71	20	100	100	32.44	42.5	42.4
Apr. 28	1300	41° 08¹	70° 42'					43.5	43.1
Apr. 28	1400	41*11.3'	70°49.41				32.25	42.5	42.3

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75,

May 16-29, 1956

						10	Sur	face	
_		Lat-	Longi -	1-meter	Surface	10-meter		T	10-meter
Date	Time	itude	tude	tow	gauze	gauze	Salin-	Tem-	temper-
		N.	W.	10 w	section	section	ity	pera- ture	ature
							,	ture	
					loading l	loading 1	%。	° F.	
May 16	1200	41°17.3'	71° 00'		1	1	32.19	47.1	47.1
May 16	1300	41°07.8'	71° 01'		2	2		47.1	46.6
May 16	1400	41°01.2'	70°57.6'		4	3	32.31	47.0	46.2
May 16	1500	40°51.2'	70°57.21		5	5		47.2	46.5
May 16	1600	40°39.71	70°56.8'		7	7	32.64	47.6	46.0
May 16	1705	40°29.7'	70°57.21		9	9		46.3	44.3
May 16	1805	40°20.5'	70°58.61		11	11	32.47	45.1	44.6
May 16	1905	40°09.1'	70°58.61		13	13		46.6	44.8
May 16	2100	40°00.5' 40°00.6'	71° 00' 70° 49'		14	14	32.57	44.1	43.8
May 16	2200	40° 00'	70° 37'		16	16		45.7	45.3
May 16 May 16	2300	40°00.81	70° 26'		17 19	17 19	32.91	45.9	45.8
May 16	2400	40°00.3	70°11.8'	1	22	22		45.3	44.8
May 17	0200	39°57.81	69°52.5'		24	24	32.52	44.6	44.1
May 17	0300	39°57.81	69° 41¹		26	25	33.74	46.6	48.4
May 17	0405	39°59.31	69°28.4'		27	27	33. 74	54.7	55.3
May 17	0505	40°00.91	69°17.5'		29	29	35.31	58.5	58.5
May 17	0605	40°00.4	69°05.5'		31	30		60.5	60.8
May 17	07 05	40°00.51	68°52.5'		32	32	35.64	63.0	63.1
May 17	0800	40°00.5'	68° 40¹		34	34		67.9	68.6
May 17	0900	40°00.71	68°28.2'		36	35	36.42	69.2	69.2
May 17	1000	40° 01'	68°17.2'		37	36		69.4	68.2
May 17	1100	40°01.2'	68°04.5'		39	39	35, 26	61.4	61.7
May 17	1208	40°06.21	67°55.81	2	42	40		59.9	59.9
May 17	1403	40°20.5'	67° 53'		44	44	35.74	64.0	65.5
May 17	1503	40°28,4'	67°48.31		26	45		66.6	66.7
May 17	1605	40°37.8'	67° 38'		48	47	32.51	44.7	43.9
May 17	1705	40°47.31	67°30.31		50	49		44.7	43.2
May 17	1807	40° 561	67° 23'		52	51	32.53	43.9	43.2
May 17	1907	41° 06'	67° 14'		54	53		43.5	41.8
May 17	2000	41°15.7'	67°06.81		56	55	32.88	43.5	42.4
May 17	2100	41° 22'	66° 581		57	56		43.8	42.7
May 17	2200	41° 27'	66° 52'		59	57	32.78	43.7	43.4
May 17	2300	41°34.7'	66°44.31	~-	60	59		42.7	42.7
May 18	0010	41°43.5'	66°39.21	3	65	60	32.66	42.6	42.4
May 18	0205	41° 57'	66° 30'		67	64		42,3	42.3
May 18	0305	42° 07'	66°25.61		69	66	32.49	43.0	42.9
May 18	0405	42° 15'	66° 20'		70	68		41.7	41.7
May 18	0505	42°24.21	66°13.2'		72	69	32.17	41.1	41.1
May 18	0605	42°32.31	66°07.1'		73	71		40.3	39.9
May 18	07 07	42°42.41	66°01.4'		75	73	32.36	39.5	39.3
May 18	0805	42° 52¹	65°54.5'		77	75		38.9	38.9
May 18	0900	43°01.5'	65° 46'		79	77	31.89	39.9	39.6
May 18	1000	43°10.5'	65° 43'		81	79		38.5	38.0
May 18	1100	43°15.4'	65°45.6'		82	81	31.90	38.6	
					loading 2	loading 2			
May 18	1208	43°15.2'	66°01.5'	4	1	1		39.9	
May 18	1400	43°14.3'	66° 19†		3	3	32.06	39.4	39.4
May 18	1508	43°15.4'	66°35.81		5	5		40.0	40.0
May 18	1610	43°17.8'	66°50.51		7	7	32.25	41.6	41.6
									1

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75,

May 16-29, 1956--Continued

				-,,					
		Lat-	Longi-		Surface	10-meter	Sur	face	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze		Tem-	temper-
2000		N.	w.	tow	section	section	Salin-	pera-	ature
							ity	ture	ature
		 	ļ						
			1				~		
	ĺ			}			%。	° F.	
May 18	1705	43°16.7'	67°03.31		8	9		39.4	39.3
May 18	1805	43°16.51	67°17.31		10	10	32.20	41.2	41.1
May 18	1905	43° 221	67°23.7'		11	11		41.5	41.4
May 18	2000	43°30.8¹	67°22.1'		13	13	32, 13	41.1	41.1
May 18	2100	43°41.2'	67°21.31		15	15		41.0	40.8
May 18	2200	43°45.2'	67°15.5'		16	16	32.35	41.0	41.0
May 18	2300	43°44.21	67°00.51		17	17		41.4	41.3
May 19	0065	43°43.7'	66°45.61	5	19	19	32.43	41.1	41.1
May 19	0208	43° 45'	66°25.7'		24	24		39.8	39.7
May 19	0300	43°55.51	66°26.2'		27	26	31.93	39.5	39.4
May 19	0410	44° 041	66° 331		29	29		40.2	40.3
May 19	0510	44° 11'	66°46.51		31	31	32.30	40.4	40.4
May 19	0605	44° 16'	66°58.51		33	33		39.8	39.8
May 19	0710	44*18.71	67°11.5'		35	35	32.15	40.1	40.1
May 19	0805	44°21.5'	67° 16'		35	35		39.8	39.8
May 19	0900	44°22.51	67°05.31		36	37	32.08	39.4	38.7
May 19	1000	44°25.4'	66° 531		38	39		39.6	39.1
May 19	1100	44°27.31	66° 43'		39	40	31.43	39.9	38.3
May 19	1208	44°29.51	66°32.5'	6	41	41		40.8	39.9
May 19	1410	44°30.5'	66°11.51		44	44	32.09	41.3	40.9
May 19	1505	44°41.5'	65°53.81		47	47		40.4	39.8
May 19	1605	44° 49¹	65°40.3'		49	49	31.48	40.2	39.9
May 19	1705	44°57.2'	65°26.31		51	51		40.0	40.0
May 19	1800	45°04.21	65°15.21		53	53	31.41	40.4	40.2
May 19	1905	45°04.41	65° 27'		55	55		39.5	39.2
May 19	2000	45°04.7'	65°40.41		56	56	29.61	41.7	41.6
May 19	2100	45*04.51	65° 531		57	57		41.6	41.2
May 19	2200	45°03.8'	66°06.5		59	59	36.95	41.8	39.8
May 19	2300	44°58.2'	66° 201		60	61		40.7	40.6
May 20	0015	44° 48'	66° 27'		62	63	30, 26	40.7	40.1
May 20	0105	44°38.7'	66°27.3'		63	64		41.2	39.7
May 20	0205	444 331	66°31.5'		64	65	31.26	39.7	39.5
May 20	0305	44°22.5'	66°27.51		65	67		40.3	40.2
May 20	0410	44°18.81	66°33.2'		67	68	32.30	40.8	40.6
May 20	0505	44°16.5'	66° 431		68	69		40.6	39.5
May 20	0605	44° 141	66° 531		69	71	32.20	41.2	41.1
May 20	07 05	44° 12¹	67° 05'		70	72		40.9	40.7
May 20	0800	44°09.51			72	73	32.16	41.1	41.0
May 20	0900	44°05.5'	67°29.51		73	7.5		41.5	41.2
May 20	1000	44* 00'	67° 42'		74	76	32.06	40.6	40.4
May 20	1100	43°55.7'	67° 551		76	77		40.5	39.4
May 20	1207	43°52.1'	68°08.81	7	78	79	31.92	40.8	40.7
May 20	1405	43°46.5'	68°31.7'		80	81		42.6	41.8
May 20	1505	43°44.4'	68°44.51		82	83	31.50	45.2	42.0
May 20	1605	43°40.4'	68°57.31		83	84		42.9	40.9
May 20	17 05	43°39.31	69°12.31		85	86	31.64	43,6	42.3
May 20	1805	43°38.3'	69° 301		87	88		44.6	42.9
May 20	1905	43° 37'	69°40.51		88	89	29.64	46.2	44.0
May 20	2000	43°34.7'	69° 53'		89	90		45.2	43.6
May 20	2100	43°28.1'	70°03.7'		91	92	30.78	45.3	44.1

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75,

May 16-29, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Surf	ace	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze		Tem-	temper-
		N.	w.	tow	section	section	Salin-	pera-	ature
							ity	ture	
-									
				}			%	°F.	
May 20	2200	43°19.5'	70°12.51		93	94		45.8	45.0
May 20	2300	43°11.5!	70°20.51		94	95	30.85	46.2	45.3
·					loading 3	loading 3			
May 21	0005	43°02.8'	70° 27'	8	1	1		44.6	42.9
May 21	0200	42°57.8'	70°20.7'		2	3	30.79	45.4	44.4
May 21	0300	42°57.4'	70° 10'		4	4		45.4	45.1
May 21	0410	42°56.0¹	69° 54'		6	6	30.98	45.8	45.4
May 21	0505	42°55.8'	69° 421		7	8		45.2	44.1
May 21	0605	42°55.1'	69°27.8'		9	10	32.67	43.5	43.1
May 21	07 05	42°54.3'	69°11.7'		11	12		43.6	42.9
May 21	0805	42°53.4'	68°55.71		13	14	32.20	42.8	41.7
May 21	0900	42°52.1'	68° 441		14	16	22 11	43.3	42.3
May 21	1005	42°51.9' 42°50.3'	68°29.8' 68°19.3'		16 17	18 19	32.11	43.4	41.9
May 21	1203	42°50.3'	68° 021	9	19	21	32, 06	43.7	43.6
May 21 May 21	1408	42°47.8'	67°38.51		24	25	32.00	44.3	43.0
May 21	1505	42° 481	67° 25'		26	27	32.26	44.5	42.9
May 21	1610	42°48.61	67° 13'		27	28	32.20	44.0	41.9
May 21	1700	42°46.5'	67° 00'		29	30	32.22	43.1	41.4
May 21	1805	42°45.4'	66° 471		30	32		41.5	40.4
May 21	1900	42°45.3'	66° 361		31	33	32.05	41.0	40.3
May 21	2000	42°45.3'	66° 24'		33	34	02.00	42.3	41.3
May 21	2100	42°42.9'	66°08.31		35	36	32.24	40.3	39.5
May 21	2200	42°42.4'	65°55.31		36	38		41.5	40.5
May 21	2300	42° 40'	65°38.31		38	40	31.75	40.6	39.3
May 22	0005	42° 38'	65° 221	10	40	42		40.3	39.9
May 22	0200	42°38,51	65°03.51		44	45	31.56	39.8	39.0
May 22	0300	42° 47'	65°03.41		46	47		40.5	39.7
May 22	0405	42° 59'	65°03.31		48	49	31.94	40.0	40.2
May 22	0505	42°59.21	65° 18'		49	51		40.9	40.0
May 22	0605	43° 00'	65° 331		51	53	31.76	39.9	39.2
May 22	07 05	43°00.21	65°48.21		53	54		39.5	39.5
May 22	0810	43°02.1'	66°03.51		54	56	32.23	39.6	39.4
May 22	0900	43° 03'	66°17.5'		56	58		40.2	39.4
May 22	1000	43° 041	66° 30'		57	59	32.09	40.7	39.9
May 22	1100	43°05.7'	66°44.51		59	61		41.1	39.8
May 22	1207	43°04.3'	66° 51'	11	59	62	32.29	42.2	41.3
May 22	1400	42°50.7'	66°57.7'		64	66		43.2	43.0
May 22	1502	42°38.6'	66°57.2'		66	68	32.22	43.0	42.9
May 22	1605	42°27.5'	66°56.8'		67	69		42.4	42.2
May 22	1700	42°20.9'	67° 00'		69	70	32.20	43.1	42.9
May 22	1805	42°21.8'	66°45.71		70	72		43.0	42.9
May 22	1910	42°20.5'	66° 32'		72	73	32.14	43.0	42.8
May 22	2000	42° 19'	66° 18'		73	75	20.17	42.9	42.8
May 22	2100	42°17.5¹	66° 051		75	76	32.17	42.7	42.5
May 22	2200	42°16.51	65° 49'		76	78	21 (1	43.4	42.7
May 22	2300	42°16.3'	65°34.5'		78	79	31.61	39.2	37.9
Ma y 23	0005	42°15.4'	65°15.3'	12	80	81		39.6	39.5
May 23	0207	42° 12'	65°02.7'		loading 4	loading 4	31.44	40.0	38.8
May 23	0305		65°03.81	1	4	5	31.44	41.7	41.3
may 20	0000	12 00.2	100 00.0.	1		9		41.1	41.3

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75, May 16-29, 1956--Continued

							Suri	ace	
		Lat-	Longi-	1-meter	Surface	10-meter			10-meter
Date	Time	itude	tude	tow	gauze	gauze	Salin-	Tem-	temper-
		N.	W.		section	section	ity	pera-	ature
								ture	
							0.		
	-						%	° F.	1
May 23	0400	42° 00'	65° 12'		6	7	31.20	41.4	41.5
May 23	0530	43°03.1'	65° 32'		9	9		43.1	43.0
May 23	0605	42°03.51	65° 39'		10	10	32.34	42.7	41.7
May 23	07 05	42°04.2	65°52.5'		12	12		43.5	43.4
May 23	0800	42°05.21	66° 07'		14	14	32.94	43.0	43.0
May 23	0900	42°06.8' 42° 08'	66° 20'		15 17	15 17	32.71	43.2 42.7	42.8
May 23 May 23	1000	42° 09'	66° 47'		19	19	32.11	42.1	42.5
May 23	1205	42°10.4'	67° 021	13	23	23	32, 59	43.4	43.3
May 23	1357	42°08.31	67°17.8'		25	25		43.9	
May 23	1505	42°06.51	67°31.1'		27	27	32, 55	44.2	
May 23	1600	42°05.21	67° 431		28	28		44.8	43.5
May 23	1705	42°03.81	67° 561		30	30	32.47	44.9	44.7
May 23	1805	4203.81	68*07.51		32	32		44.6	44.5
May 23	1905	42°03.91	68°21.8'		34	34	32.48	44.5	44.2
May 23	2000	42°04.7'	68°34.8'		36	36		44.4	44.2
May 23	2100	42°03.81	68°45.2'		38	37	32.36	43.9	43.8
May 23	2200	42°03.7'	68° 561		39	39	,	44.6	44.4
May 23	2305	42°03.6'	69°12.3'		41	41	32.41	45.0	44.9
May 24	0005	42°03.5'	69°26.2'		43	43		45.4	45.4
May 24	0105	42°07.7'	69°32.9'		45	44	32.21	44.6	44.6
May 24	0205	42° 13'	69°32.51		46	45		44.9	44.9
May 24	0305	42°19.5'	69°32.1'		47	46 48	31.93	45.1 45.7	45.1 45.6
May 24	0405	42°28.2'	69° 31' 69°31.5'		49 50	50	31.69	45.5	45.4
May 24 May 24	0505 0605	42°38.2° 42°38.2°	69°44.2'		53	52		45.4	45.4
May 24	07 05	42°36.71	69°56.21		55	54	31.64	46.1	46.1
May 24	0805	42°35.51	70° 08'		56	56		46.1	46.1
May 24	0910	42°34.21	70°20.81		58	57	31.38	44.3	44.2
May 24	1005	42°34.21	70° 321		59	58		40.7	40.1
May 24	1100	42° 281	70°36.51		62	61	31.40	45.3	44.8
May 24	1205	42°17.61	70°33.81	14	65	65		45.6	44.5
May 24	1400	42° 081	70° 21'		67	67	31.77	44.8	
May 24	1500	42° 07'	70° 081		69	68		45.8	
May 24	1600	42° 041	69° 541		71	70	31.82	45.4	
May 24	1700	41°52.5'	69° 52'		73	71		44.7	44.0
May 24	1803	41°41.6'	69°49.81		75	73	31.96	45.3	44.8
May 24	1900	41°32.5'	69° 45'		77	75		43.1	43.1
May 24	2000	41° 321	69° 36'		78	76	32, 26	44.1 44.1	44.0
May 24	2100	41°33.8'	69°24.7'		80	77	32, 28	44.1	44.5
May 24	2200	41°35.8' 41°37.2'	69°12.2' 69°00.2'		83	80	32, 20	44.5	44.5
May 24	2300	41° 35'	68°45.4¹	15	85	82	32.48	43.1	43.2
May 25	0000	41 33.	00 40,4	13	loading 5	loading 5	54. 20	20. 1	10.2
May 25	0200	41°31.61	68°29.6'		3	3		44.7	44.6
May 25	0307	41°26.5'	68° 12'		5	5	32.74	45.9	46.1
May 25	0414	41°26'	67°59.51		7	7		45.8	46.0
May 25	0500	41°26.2'	67° 451		9	9	32.87	45.7	45.8
May 25	0610	41°26.3'	67°33.2'		11	10		45.5	45.6
May 25	0700	41° 27'	67* 201		12	12	32.69	45.2	44.9
	1			1	•				

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75,

May 16-29, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Sur	face	10-meter
Date	Time	itude N.	tude W.	1-meter tow	gauze	gauze section	Salin- ity	Tem- pera- ture	temper- ature
							0,		-
							%	°F.	
May 25	0810	41°29.8'	67°10.5'		14	14		44.5	44.4
May 25	0900	41°31.5	66°57.5'		16	16	32.79	44.1	43.8
May 25	1000	41°32.5'	66° 47'		17	17		43.6	43.3
May 25	1100	41°31.6'	66° 32¹		19	19	32.18	43.3	42.0
May 25	1205	41°31.6'	66°18.7'	16	21	21	04 00	41.6	40.2
May 25	1405 1505	41°31.2'	65°56' 65°49.5'		26 27	25	31.92	44.4	44.3
May 25	1605	41°26.5' 41°18.3'	65°57.71		27	27	21 00	44.2	43.4
May 25 May 25	1705	41° 12'	66° 061			29	31.99	44.0	42.7
May 25	1800	41° 06'	66° 15'		31 32	30 32		42.9	42.1
May 25	1905	41° 04'	66°28.1'		34	34	32.11	43.1	41.8
May 25	2000	41° 04'	66° 42¹		36	35	32, 22	43.6 44.3	42.1
May 25	2100	41.04.3	66*56.81		38	37	32.22	44.7	43.8
May 25	2200	41° 05'	67°09.51		40	39	32, 62	44.5	43.0
May 25	2300	41*06.81	67°25.51		43	41	55.05	45.6	44.6
May 26	0005	41*07.21	67° 40¹	17	44	44	32,74	45.6	45.3
May 26	0205	41°06.5'	68° 00'	1 11	47	47		45.1	45.2
May 26	0305	41° 04'	68°13.51		50	49	32,67	45.6	45.8
May 26	0410	41°02.2'	68°29.51		52	51		45.1	45.1
May 26	0500	41 00.5	68° 381		53	52	32.73	44.7	44.7
May 26	0605	40°59.51	68°50.51		55	54		43.4	43.4
May 26	07 08	40° 59'	69° 061		57	57	32.60	43.4	43.4
May 26	0800	40° 551	69°12.8'		59	58		43.3	43.0
May 26	0900	40°47.2	69°14.8'		61	60	32.42	43.7	43.6
May 26	1000	40° 41'	69° 10'		63	61		45.3	44.7
May 26	1100	40°42.81	68°57.7'		65	63	32.54	46.9	46.3
May 26	1205	40*43.3	68°45.3'	18	68	65		45.0	45.0
May 26	1410	40°42.51	68° 23'		71	69	32.54	48.4	45.8
May 26	1505	40° 42'	68° 09'		73	71		49.1	47.2
May 26	1605	40°40.61	67°55.3¹		75	73	32.54	48.6	46.4
May 26	1700	40°27.51	67°39.51		77	75		48.9	46.9
May 26	1805 1900	40°37.2°	67°29.3'		78 80	76	32.58	49.1	44.2
May 26 May 26	2000	40°38.31	67*03.5		82	78	24 25	58.4	54.5
May 26	2100	40°38.5	66°49,5		84	80 81	34.35	68.4	67.8
May 26	2200	40 38.3	66°46.61		85	82	35.70	69.2 69.2	69.5
May 26	2300	40° 21'	66°46.71		86	83		68.0	68.3
May 27	0005	40° 10'	66°45.81		88	87		64.8	00.3
May 27	0105	40°05.51	66°45.71	19	90	89	35.67	69.1	69.0
May 27	02 05	40° 051	66° 501		92	90		67.4	67.6
May 27	0305	40°11.7'	66°59.51		94	92	35, 49	66.4	66.5
May 27	0405	40°16.51	67°12.5'		96	93		66.0	66.2
May 27	0505	40°20.71	67°24.7'		97	95	35, 96	68.0	68.1
May 27	0600	40° 271	67° 331		98	96		60.3	60.4
May 27	0705	40° 331	67° 461		100	98	33,93	52.9	52.4
May 27	0810	40*37.21	68*01.81	20	102	99		44.9	
					loading 6	loading 6			
May 27	1000	40*28.51	68°05.51		99	2	33.14	48.8	48.7
May 27	1100	40° 231	68° 081		98	3		64.4	63.9
May 27	1210	40°15.5	68°13.5'		96	5	34.06	62,2	62.0

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 75,

May 16-29, 1956--Continued

							Sur	face	
Date	Time	Lat- itude N.	Longi- tude W.	1-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	10-meter temper- ature
May 27	1300	40° 09'	68°16.7'		95	6	%	° F. 63, 3	63, 2
May 27	1405	40° 17'	68°28.8'		92	8	32.74	46.8	46.2
May 27	1502	40° 22'	68°38.51		90	10		48.2	48.1
May 27	1605	40°25.51	68*50.31		88	11	32, 58	46.1	46.1
May 27	1700	40°28.51	68°58.51		87	13		46.1	45.8
May 27	1805	40°20.21	69°03.71		85	14	32, 59	47.9	47.9
May 27	1900	40° 14'	69°06,51		83	16		46.9	46.8
May 27	2000	40°08.51	69° 12'		82	17		51.7	52.2
May 28	0900	40° 211	70°21.2'		67	29	32.60	48.4	48.2
May 28	1000	40° 15'	70° 241		66	30		48.8	48.5
May 28	1100	40° 07'	70°25.41		65	32	32.58	47.8	
May 28	1205	39° 571	70° 261		63	34		61.4	
May 28	1310	39*46.51	70°27.81		62	36	34.88	57.4	57.4
May 28	1405	39*47.71	70°40.71		60	38		56.5	56.3
May 28	1505	39*49.51	70°53.51		59	40	35.62	61.6	61.2
May 28	1600	39° 54'	71° 04'		57	42		60.0	59.9
May 28	1705	40°03.5	71°11.7'		55	44	32.68	49.4	49.5
May 28	1800	40°11.51	71° 18'		53	46		51.1	48.6
May 28	1905	40° 18'	71°25.5'		52	47	32.09	51.2	49.3
May 28	2000	40°27.51	71°33.5'		50	50		51.5	49.6
May 28	2100	40° 231	71°39.5		48	52	31.17	51.4	51.2
May 28	2200	40°13.5	71°47.61		46	54		51.1	50.0
May 28	2300	40°06.51	71° 56'	==	45	56	31.54	51.2	50.0
May 29	0005	40°08.51	72° 00¹	21	44	57		51.7	52.2
May 29	0200	40°17.81	71°59.5'		41	60	31.14	51.4	51.4
May 29	0305	40°30.5°	72°02.31		39	62		51.4	51.4
May 29	0405	40°40.51	72°03.41		37	64	30.68	50.6	50.6
May 29	0505	40°48.21	71° 59°		35	67	20 00	50.2	50.3
May 29	0600	40° 53¹	71° 47'		33	69 71	30, 60	48.0 47.6	47.5
May 29	0705	40° 591	71°37.3¹		31 30	73	31.37	48.4	48.0
May 29	0800	41° 04' 40° 10'	71° 27' 71° 16'		28	7.5 7.5	31.31	48.5	48.6
May 29	0900		71° 00'	22	26	77	31.91	50.3	50.0
May 29	1020	41°17.5'	11 00.	22	20	- 11	31. 31	30.0	30.0

Table 6.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 76,

June 11-24, 1956

							Surf	ace	
		Lat-	Longi-	1	Surface	10-meter		T	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
2000		N.	W.	tow	section	section	ity	pera-	ature
		14.	" "		Document.	500000	1 Ly	ture	
							%		
					loading l	loading l	/00	° E.	
June 11	1430	41°17.5'	71° 00'		1	1	32.09	56.0	53.6
June 11	1600	41°04.51	71° 01'		3	3		56.6	54.6
June 11	1700	40°54.71	71° 01'		5	4	31.58	57.9	55.3
June 11	1800	40°45.81	70°01.21		6	6		56.6	54.8
June 11	1905	40° 351	71°00.81		8	8	33.24	55.8	53.5
June 11	2007	40°24.31	71°00.71		10	10		55.2	54.3
June 11	2105	40°16.4'	71° 01¹		11	11	34.10	59.8	59.1
June 11	2205	40°06.31	71° 00'		13	12		59.6	58.6
June 11	2305	40° 01'	70° 541		14	14	34.70	61.4	
June 12	0000	39*59.51	70°37.51	1	16	15		59.1	59,3
June 12	0210	40°00.71	70°18.1'		20	19	34.91	62.3	62.5
June 12	0305	40° 001	70°05.51		22	21		59.0	55,6
June 12	0405	39*59.81	69°53.21		23	23	32.64	54.4	60.6
June 12	0505	39°57.81	69° 361		25	25		54.2	52.2
June 12	0605	39°58.21	69° 24'		27	26	33.09	55.9	60.3
June 12	0705	39°58.51	69° 11'		28	28		56.1	56.7
June 12	0805	39*58.51	68°57.6'		30	30	32.48	54.5	54.4
June 12	0905	39°58.51	68° 451		31	32		57.4	61.4
June 12	1005	40° 00¹	68° 341		33	33	32.64	53.9	53.7
June 12	1105	40°00.51	68°20.51		34	35		54.1	53.9
June 12	1205	40° 01'	68° 08'	2	37	36	34.93	62.3	62.7
June 12	1405	40°10.5	67° 551		39	40	04.00	64.2	63.8
June 12	1505	40 10.5	67°49.51		41	42	34.02	59.5	60.3
June 12	1605	40°27.5'	67°43.2'		43	44	34.02	59.8	58.5
June 12	1705	40°35.1'	67°37.51		44	45	32,55	51.5	55.6
June 12		40° 47'	67°31.5'		47	48	32.00	51.2	48.2
June 12	1805	40°52.3'	67° 251		48	49	32.96	50.7	47.5
June 12	2005	41° 01°	67°18.51		50	50		50.7	47.5
	2100	41 07 .3	67° 15'		51	52	32.84	47.6	46.8
June 12	2205	41°17.41	67°09.5	H-	53	54	32.04	47.5	47.3
June 12	2305	41°27.9	67° 04'		55	56	32.66	46.8	46.7
June 12 June 13	0005	41°36.5'	66°58.51	3	58	58	32.00	46.5	46.2
		41°50.21	66° 44'		60	60		45.5	45.4
June 13	0205	42°00.21	66°34.51		62	62		45.5	44.6
June 13	0305	42°00.2°	66° 261		64	64	32.34	45.0	44.8
June 13	1	42°17.9'	66°13.5'		66	66	32.34	46.6	46.6
June 13	0505								
June 13	0605	42° 261	66°08.21		68	68	32.30	46.9	46.9
June 13	07 05	42°34.1'	66° 021		69	71			44.8
June 13	0805	42°40.5'	65°58.51		71		33.07	43.6	
June 13	0905	42° 51'	65° 581		73	73	22 42	43.3	44.0
June 13	1000	43° 01'	65° 581		75	75	32.43	42.4	
June 13	1100	43° 10'	65° 54'		76	76	20 20	41.9	41.0
June 13	1205	43°11.81	66°09.51	4	79	79	32.36	42.4	41.4
June 13	1405	43° 11'	66°34.7'		82	82	20 40	44.1	42.5
June 13	1505	43°11.5'	66° 49'		83	83	32.42	46.5	45.4
June 13	1605	43° 11'	67° 00¹		84	84		48.0	45.9
June 13	1705	43° 141	66°49.5'		85	85	32.86	47.1	46.7
June 13	1805	43°21.3'	66° 39'		86	87		46.5	45.8
	1905	43°26.31	66°28.41		88	89	32,47	46.1	43.7
June 13 June 13	2005	43° 231	66°16.8'		90	92		45.4	41.9

Table 6. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatrass Ill cruise no. 76,

June 11-24, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Sur	face	10-meter
Date	Time	itude N.	tude W.	1-meter tow	gauze section	gauze section	Salin- ity	Tem- pera- ture	temper -
							%	° F.	
June 13	2110	43° 251	66°29.4'		92	93	32, 56	46.0	43.3
June 13	2205	43° 35'	66° 43¹		93	95	32.30	46.0	44.4
June 13	2305	43° 351	66° 56'	5	95	96	32.48	47.2	45.6
0 4110 10	2000	10 00			loading 2		54. 10		10.0
June 14	0005	43*39.31	66°59.51		1	97	~-	44.9	44.7
						loading 2			
June 14	0210	43°48.51	66° 48'		2	99	32.74	46.6	45.1
June 14	0305	43°55.91	66° 42'		4	97		43.7	42.6
June 14	0405	44°04.91	66°34.3'		6	95	32.87	45.2	43.9
June 14	0505	44° 171	66° 30¹		9	92		43.3	43.1
June 14	0605	44°22.5' 44°28.5'	66° 40¹		11	90 89	32.17	42.9 43.2	43.0
June 14 June 14	07 05 08 05	44 321	66°39.5°		11	88	30.93	47.1	42.6
June 14 June 14	0905	44°34.5¹	66° 21'		14	87	30.33	47.7	45.1
June 14	1005	44°37.5'	66° 09'		16	85	32, 17	45.6	42.9
June 14	1105	44°44.51	65°58.81		18	83		45.3	42.7
June 14	1205	44*50.51	65°44.5'	6	20	81	32, 19	47.8	46.9
June 14	1405	45*02.51	65°19.31		25	76		46.5	45.4
June 14	1505	45.03.51	65°29.51		26	75	31.74	43.6	42.1
June 14	1605	45° 03'	65°40.81		27	74		44.5	41.1
June 14	1705	45°02.5'	65° 521		29	72	30.86	48.9	43.2
June 14	1805	45° 01'	66° 06'		30	71		48.5	42.4
June 14	1905	44°59.7'	66° 201		32	69	30.19	45.8	42.0
June 14	2005	44° 561	66° 32'		33	68		44.6	43.5
June 14	2105	44*47.2	66°24.5'		34	67	31.61	46.8	46.3
June 14	2205	44°37.2¹	66°17.3'		36	65	01 67	46.5	46.4
June 14	2310	44°29.5¹	66° 18'	7	38 41	62 60	31.67	45.7	45.1
June 15	0005	44°25.5' 44° 19'	66° 27'		43	57	32.24	46.7	46.5
June 15 June 15	0305	44° 15'	66° 551		45	56		45.1	45.1
June 15	0405	44° 10'	67° 08'		47	54	32.44	45.0	44.8
June 15	0505	44° 041	67°19.31		49	52		49.1	48.0
June 15	0605	44° 00'	67°31.5'		51	51	32.08	49.3	46.8
June 15	0705	43° 541	67°44.1'		52	49		50.0	48.7
June 15	0810	43° 51'	67° 561		54	47	32.11	49.5	48.3
June 15	0910	43°51.2'	68°11.5'		56	46		46.5	43.9
June 15	1005	43° 51'	68° 25'		58	44	31.86	48.3	43.1
June 15	1105	43°47.2'	68°37.8°		59	42		48.4	45.1
June 15	1205	43°43.7'	68°49.21	8	61	41	31,88	47.8	46.0
June 15	1405	43°39.91	69° 13'		64	38	21 77	50.4	47.3
June 15	1505	43°39.51	69°24.2'		65	36 34	31.77	53.8 54.0	48.9
June 15	1605	43° 39' 43°32,5'	69°38.21 69° 291		66 68	33	31.26	54.8	50.9
June 15	1705	43° 32.5'	69°21.8'		69	30	31.20	53.5	53.0
June 15 June 15	1905	43° 20'	69° 241		71	29	31.34	55.1	54.1
June 15	2005	43°18.2'			72	27		54.7	52,1
June 15	2105	43°13.6'			73	26	31.10	59.6	56.1
June 15	2205	43*09.81			75	24		54.2	53.0
June 15	2310		70007.51	9	76	23	30.01	59.2	48.5
	1	1	1	,	,	•			

Table 6. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 76, June 11-24, 1956--Continued

_									
							Sur	face	
		Lat-	Longi-	, ,	Surface	10-meter			10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
		N.	w.	tow	section	section	ity	pera-	ature
							l ity	ture	
		· · · · · · · · · · · · · · · · · · ·	1						
							%	0.0	
			1	1		1	/00	° F.	1
June 16	0010	43° 061	70°02.51		76	23		54.7	44.7
June 16	0205	43°22.21	69°39.51		80	20	31.68	53.7	50.6
June 16	0305	43°00.21	69°25.51		81	18		52.5	51.1
June 16	0405	43° 00¹	69°14.5¹		82	17	32,10	52.4	51.4
June 16	0505	42° 581	69° 001		84	15		50.1	49.7
June 16	0605	42° 581	68° 471		88	13	31.77	52.1	51.4
June 16	07 05	42°57.51	68° 351		87	12		52.0	51.6
June 16	0810	42°55.51	68° 20'		89	10	36,00	50.2	48.1
June 16	0905	42° 551	68*07.51		90	9		51.8	49.8
June 16	1005	42° 531	67° 541		92	7	31.98	52.2	51.3
June 16	1105	42° 521	67°41.3'		93	6		52.0	48.3
June 16	1205	42°49.61	67°27.21	10	95	4	31.95	51.4	49.3
June 10	1200	12 10.0	01 21.2	10	loading 3	loading 3	01.00	01.1	10.0
June 16	1405	42° 481	67° 131		2	2		52.0	48.7
June 16	1505	42° 481	66° 59¹		3	4	32, 33	50.5	47.3
June 16	1605	42°47.31	66° 45¹		5	5		50.8	49.0
June 16	17 05	42° 471	66°32.51		6	7	32.02	47.2	42.2
June 16	1805	42°46.21	66°19.5'		7	8		44.3	43.2
June 16	1905	42° 461	66° 061		9	10	32, 52	44.4	42.9
June 16	2005	42°42.81	65° 51'		11	12		47.3	43.7
June 16	2105	42° 41'	65°37.9'		12	14	31.89	48.4	46.6
	2205	42°37.51	65°25.51		14	15	51.00	46.5	45.1
June 16 June 16	2305	42°36.5	65°13¹		16	17	31.35	48.2	47.0
	0005	42°44.81	65°11.5'	11	19	21	31.33	47.4	43.2
June 17		42°48.5	65° 26'		21	22	31,72	46.6	43.6
June 17	0205	42°49.5°	65° 431		22	24		46.9	41.9
June 17 June 17	0405	42 49.5	65° 561		23	26	32.48	44.8	42.8
	0505	42° 421	66° 11'		25	28	52.40	44.8	43.6
June 17		42° 431	66° 251		26	30	32.28	45.1	44.7
June 17	0605	42 43	66°381		27	31	32.20	50.3	49.0
June 17	07 05	42°36.5'	66° 41'		28	32	32.19	51.0	49.1
June 17	0805	42° 331	66° 281	1	29	34	32.13	49.5	46.8
June 17	0905					35	31.82	49.5	47.3
June 17	1005	42°29.5¹ 42° 27¹	66° 14'	12	31 32	37	31.62	50.5	48.4
June 17	1105	42°22.8'	65°45.1	12	32	39	32.10	52.5	47.6
June 17	1210 1410	42°22.8°	65° 26'		36	43	32.10	50.8	48.6
June 17	1510	42° 17'	65° 271		38	45	31.37	48.7	44.8
June 17		42° 04'	65° 351		40	47	31.31	51.0	49.8
June 17	1605	41°51.5	65*43.51		40	48	32.14	52.1	50.2
June 17	1705		65° 481		44	50	32.14	49.7	46.1
June 17	1805	41° 45¹	65*53.51		44	52	32.00	52.0	49.1
June 17	1905	41 381			45	53	32.00	49.8	47.7
June 17	2005	41*28.5	65° 571	1	48	56	32, 17	49.5	48.9
June 17	2105	41°25.51	66° 10¹		50	57		46.7	46.4
June 17	2205	41° 251	66*21.5	1		58	22 55	48.2	47.1
June 17	2305	41°24¹	66° 33'	1.0	51		32,55		45.8
June 18	0005	41*24.5	66° 45¹	13	54	60	22 66	47.7	
June 18	0205	41° 25'	67° 10'		56	63	32,66	48.5	48.5
June 18	0305	41*27.5	67°23.51		58	65	22 50	49.9	49.8
June 18	0405	41° 28'	67°41.5		60	67	32.58	50.2	
June 18	0505	41° 291	67° 561		62	69	22 60	50.9	50.9
June 18	0605	41° 30°	68° 11'		64	70	32.60	51.4	51.4

Table 6. -- Date, time, and position for temperature and salinity records in relation to I-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 76,

June 11-24, 1956--Continued

							Sur	face				
		Lat-	Longi-	l-meter	Surface	10-meter		т.	10-meter			
Date	Time	itude	tude	tow	gauze	gauze	Salin-	Tem-	temper-			
		N.	W.		section	section	ity	pera- ture	ature			
				ļ				ture	-			
							0,	° E				
							/00	,				
June 18	07 05	41°29.5'			65	72		50.1	50.3			
June 18	0810	41° 28'	68° 36'		67	73	32,50	49.6	49.3			
June 18	0905	41°24.5' 41° 25'	68°47.5'		68 70	75 77	32, 10	53.1 52.4	52.7 52.4			
June 18 June 18	1010	41°27.5'		14	71	78	32.10	54.0	49.9			
June 18	1210	41°29.5'			74	80	32.05	50.1	47.9			
June 18	1405	41° 40'	69° 34'		75	81		53.9	52.7			
June 18	1505	41°38.51	69° 381		76	83	31.56	54.3	53.6			
June 18	1605	41° 55'	69°42.5'		77	84		54.4	53.8			
June 18	1705	42°04.5'	69° 46'		79	86	31.59	54.4	53.7			
June 18	1805	42* 121	69*54.51		81	88		53.7	51.8			
June 18	1905	42°16.51	70°08.51		83	90	31.62	55.9	51.5			
June 18	2005	42° 23'	70° 291		84	92		55.5	54.6			
June 18	2105	42°28.51	70° 291		85	93	30. 37	55.2	51.8			
June 18	2205	42°34.21	70°39.71		86	94		55.7				
June 18	2330	42°34.51	70° 271	15	86	94		56.1				
T 40	0040	40000 51	70000 51		loading 4	loading 4	00.00	54.0	F2 0			
June 19	0010	42°37.51	70°26.51		1 2	1 3	30.83	54.8 53.4	53.9			
June 19	0105	42° 46¹ 42° 46¹	70° 25' 70° 14'		4	4	30.81	53.4	51.5			
June 19 June 19	0210	42°46.81	70° 02°		5	5	50.01	53.3	52.7			
June 19	0405	42 40.8	69°58.51		7	7	31.82	53.1	53.0			
June 19	0505	42° 43¹	69°36.51		8	9		53.0	52.9			
June 19	0605	42° 44'	69°22.51		10	11	31,89	52.5	52.5			
June 19	07 05	42° 391	69°16.5'		12	12		53.6	53.3			
June 19	0815	42°27.5	69° 171		14	15	31.93	54.6	54.6			
June 19	0900	42° 201	69° 17'		15	16		55.0	54.9			
June 19	1005	42° 11'	69° 17'		17	17	31.80	55.5	54.7			
June 19	1100	42° 06'	69°10.5'		18	18		55.4	55.0			
June 19	1215	42°05.5	68*54.81	16	19	20	32.08	53.6	52.0			
June 19	1405	42*04.81	68° 321		23	23		53.5	53.0			
June 19	1505	42° 051	68° 18'		24	25	32.44	53.2	52.9			
June 19	1605	42°06.3'			25	27	22 50	52.1	50.1			
June 19	1705	42° 05' 42° 05'	67° 50° 67° 36°		27 28	28	32,50	51.9 51.3	51.8 49.6			
June 19	1805 1905	42 05	67° 24'		28	31	32, 55	48.1	46.7			
June 19 June 19	2005	42° 071	67 091		31	33	32.33	47.3	47.2			
June 19	2105	42°08.51			32	34	32, 38	49.3	48.9			
June 19	2205	42° 061	66° 41'		34	36		49.6	48.9			
June 19	2305	42*05.51			35	38	32, 30	48.9	48.5			
June 20	0005	42°03.71	66*10,41	17	37	39		48.6	48.5			
June 20	0205	41° 441	66° 061		42	44	32.33	48.5	48.0			
June 20	0305	41° 37'	66° 14'		43	46		48.1	48.0			
June 20	0405	41° 281	66° 24¹		45	47	32.14	48.2	47.5			
June 20	0505	41° 21'	66° 321		46	48		47.9	47.2			
June 20	0605	41° 12'	66° 401		48	50	32.28	48.9	48.7			
June 20	07 05	41° 04'	66*48.5		49	52	22 50	48.6	47.1			
June 20	0810	41*04.5	67° 04' 67° 13'		51 52	54 55	32.56	49.7 51.4	48.6			
June 20 June 20	0905 1005	41° 05' 41°05.3'			53	56	32.62	52.0	50.8			
Julie 20	1003	41 00.5	01 21.3		1 00		02.02	02.0	1 00.0			

Table 6. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 76,

June 11-24, 1956--Continued

							Sur	face	
_		Lat-	Longi-	1	Surface	10-meter		_	10-meter
Date	Time	itude	tude	1-meter	gauze	gauze	Salin-	Tem-	temper-
		N.	W.	tow	section	section	1	pera-	ature
							ity	ture	
							9/	° F.	
		,					60	P.	1
June 20	1105	41° 03'	67°44.51	18	55	58		50.4	48.1
June 20	1205	41°03.21	67° 51'		57	60	32,63	50.0	48.9
June 20	1405	41°01.31	68° 131		59	63		51.3	51.1
June 20	1505	41°01.2'	68°26.5'		60	65	32,66	49.9	49.2
June 20	1605	41° 01'	68° 41'		62	66		49.4	49.5
June 20	1705	41.02.51	68° 561		64	69	32, 59	48.1	47.4
June 20	1805	40° 571	69°02.61		65	70		47.8	46.8
June 20	1905	40° 481	69°02.81		67	72	32.43	48.1	45.9
June 20	2005	40°44.51	68° 561		68	73		50.7	50.0
June 20	2105	40°44.31	68° 43¹		69	75	32.13	52.8	
							34.13		50.4
June 20	2205 2305	40° 44¹ 40°44.5¹	68° 30'		71 72	76	20 50	53.0	48.1
June 20						78	32.56	53.2	51.3
June 21	0005	40°45.71	68°00.81	19	73	80		50.8	51.3
June 21	0205	40° 461	67°40.51		78	83	32.40	52.0	50.9
June 21	0305	40°45.31	67°27.5'		79	85		50.7	49.9
June 21	0405	40°46.21	67° 15¹		80	86	32.33	48.7	47.6
June 21	0505	40°44.31	67° 021		82	88		49.1	48.6
June 21	0605	40° 37'	67° 021		83	90	32.20	49.1	48.3
June 21	0705	40° 281	67°14.51		85	92		64.0	64.0
June 21	08 05	40°251	67° 201		86	94	34.52	62.1	62.9
June 21	0905	40°35.51	67° 298		88	96		50.4	49.6
June 21	1005	40° 41'	67°41.51		90	98	32, 26	50.5	49.3
June 21	1100	40°35.5'	67°47.51		91	99		50.5	46.9
	1100	10 00.0	0. 1	1	loading 5	loading 5		00.0	10.0
June 21	1207	40°27.81	67°56.51	20	1	1	32.69	58.6	58.6
June 21	1405	40°17.5'	68° 091	20	3	3		60.8	60.4
June 21	1510	40°11.5'	68° 18'		5	5	34, 22	61.5	61.9
June 21	1605	40°18.5'	68°27.5		6	7			
								56.9	56.1
June 21	1705	40° 25¹ 40° 32¹	68° 36!		8	9	32.62	53.7	51.8
June 21	1805		68°45.51		10	10		53.9	53.2
June 21	1905	40° 40'	68° 541		11	12	32.54	51.5	50.0
June 21	2005	40°39.51	69° 04'		14	14		51.4	48.7
June 21	2105	40° 35'	69°10.5'		15	15	32.53	52.6	49.0
June 21	2215	40° 271	69° 281		16	17		54.7	52.3
June 21	2305	40°20.51	69°22.51		17	18	32.46	54.9	54.8
June 22	0010	40°12.51	69°31.4'	21	21	19		57.8	57.7
June 22	0210	39° 571	69° 40'		23	23	34.73	65.0	65.0
June 22	0305	39° 561	69°45.51		24	25		64.2	64.4
June 22	0405	40° 04'	69° 521		26	26	33.68	60.2	60.7
June 22	0505	40°11.51	70° 001		27	28		57.1	56.6
June 22	0605	40°19.51	70°08.51		29	30	32.40	56.1	55.3
June 22	0705	40° 271	70° 14'		31	31		56.1	55.6
June 22	0810	40° 361	70°24.51		33	33	32, 36	56.3	56.3
June 22	0905	40° 321	70° 30¹		35	35		57.1	56.7
June 22	1000	40 24	70°37.51		36	36	32,60	58.3	56.6
June 22		40° 16'	70° 44¹	1	38	37	32.00	58.9	58.1
	1105				30	21		00.9	1.00 I
	1105			20	49	40	22 02	00 0	E0 0
June 22	1205	40°08.31	70°52.51	22	42	40	32.93	60.6	58.8
June 22 June 22	1205 1405	40°08.31 39° 581	70°52.5¹ 71° 04¹		44	43		63.1	62.3
June 22	1205	40°08.31	70°52.51				32.93 32.69		

Table 6. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross 111 cruise no. 76,

June 11-24, 1956--Continued

		Lat-	Longi-		Surface	10-meter	Sur	face	10
Date	Time	itude N.	tude W.	l-meter tow	gauze section	gauze	Salin- ity	Tem- pera- ture	10-meter temper- ature
June 22 June 22 June 22 June 22 June 22 June 22 June 23 June 24 June 24	1705 1805 1905 2005 2105 2200 2300 0000 0205 0310 0405 0505 0605 0705 0805 0900 1100 1205 1405 1505 1605 1705 1805 1905 2206 2306 2105 2206 2306 2105 2206 2306 2306 2306 2306 2306 2306 2306	40° 24' 40°20.5' 40° 12' 40° 05' 39°58.5' 40° 09' 40°10.1' 39° 53' 39° 45.5' 40° 10' 40° 10' 40° 10' 40° 18' 40° 28' 40° 34' 40° 25' 40° 15.2' 40° 15.2' 40° 33' 40° 27' 40° 33' 40° 40' 40° 33' 40° 57' 40° 57' 41° 14' 41° 17'	71°17.5¹ 71° 23¹ 71° 28¹ 71° 35.5¹ 71° 26¹ 71° 35.5¹ 72° 01.² 72° 02.² 72° 22.5¹ 73° 04¹ 73° 04¹ 72° 58¹ 72° 58¹ 72° 48¹ 72° 58¹ 72° 42¹ 72° 32.5¹ 72° 34.9¹ 72° 32.5¹ 72° 34.9¹ 72° 32° 72° 31° 72° 31° 72° 31° 72° 58¹ 72° 58¹ 72° 58¹ 72° 58¹ 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 72° 31° 71° 31° 71° 01°	23	49 51 53 55 56 57 58 64 67 68 70 71 73 74 76 77 78 82 loading 6 1 2 2 3 5 6 9 10 12 13 15 16 18 19 20	48 49 51 53 54 56 57 59 62 64 65 67 68 70 71 73 74 76 78 80 81 83 84 86 87 89 91 93 94 96 97 98	% 32.24 32.30 33.20 30.73 30.91 31.03 30.58 30.71 30.93 30.79 31.164 32.09 32.11 32.10	°F. 62.4 60.4 60.2 62.4 63.0 63.0 63.1 64.2 63.8 64.2 63.8 64.2 63.8 64.2 63.8 64.2 63.8 64.2 63.8 61.7 61.5	60.1 59.9 57.9 59.0 61.1 60.0 61.3 62.4 60.5 63.1 62.4 61.5 59.1 58.8 62.3 62.4 62.9 60.9 60.9 60.9 60.9 60.9 60.9 60.9

Table 7.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 71, February 20-March 2, 1956

	Tow			Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	Feb. 21	1215	-	-	-	-	aa. -	RM.
2	Feb. 22	0625	H-C *H HE AM	12 - - -	- - -	- 19 1	1.47 3.84 32.0 17.0	1.36-1.54 3.17-4.71 -
3	Feb. 22	1800	No tow	-	-	-	-	-
4	Feb. 23	1220	-	-	-		-	-
5	Feb. 24	0050	-	-	-	-	-	-
6	Feb. 24	1310	*C	-	-	1	1.50	-
7	Feb. 25	0320	HE	-	-	10	36.0	-
8	Feb. 27	1750	HE	-	-	1	42.0	-
9	Feb. 29	1230	H-C A *H *C *A	62	VI - - -	- 80 27 4	1.55 2.29 4.11 4.66 5.36	1.45-1.63
10	Feb. 29	1835	H-C A *H *C *A AM C H	73 20 - - - - -	V V - - -	34 43 10 2 2	1.55 2.36 4.10 4.51 4.93 8.30 3.85 3.52	1.41-1.67 2.11-2.64 3.39-4.58 4.00-4.93 4.18-5.90 8.10-8.50 3.52-4.18
11	Mar. 1	1430	H- C	15	III	-	1.52	1.41-1.63
12	Mar. 2	0900	AM H	-	-	110 7	18.0 7.23	9.00-23.0 6.60-7.48

^{*}Hatched aboard ship.

Table 8.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 72, March 21-31, 1956

	Tow			Number	Modal	Number	Average	D
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	Mar. 22	0010	-	-	-	_	元 叔。 —	mm. —
2	Mar. 22	1230	-	-	-	-	-	-
3	Mar. 23	0020	H-C A *H *C *A C H	15 6	V V - - -	18 11 4 4 6	1.55 2.36 4.15 4.63 5.48 4.62 3.78	1.50-1.58 2.24-2.46 3.52-4.49 4.31-5.10 5.28-5.85 4.22-5.37 3.04-4.18
4	Mar. 23	1550- 1615	-	-	-	-	-	-
5	Mar. 24	1240	-	-	-	-	~	-
6	Mar. 26	0950	H *H	11	II -	- 4	1.53 4.19	1.45-1.58 4.09-4.40
7	Mar. 27	0020	H-C *H *C H HE AM	5 - - - -	V	9 5 1 1	1.49 4.13 4.51 7.44 39.0 20.6	1.45-1.54 3.43-4.53 3.96-4.84
8	Mar. 27	1515	*H *A	-	-	1	3.83 3.74	-
9	Mar. 28	1215	*H *C H C	- - -	- - -	2 5 1 1	4.21 4.66 4.09 3.21	4.18-4.27 4.18-4.84
10	Mar. 29	0420	m	-	-	-	-	-
11	Mar. 29	1610	H-C A *H *C *A	43 3 - -	V III - -	28 11 2	1.52 2.33 3.76 3.96 4.44	1.36-1.63 2.29-2.42 3.43-4.40 3.52-4.22 4.22-4.66
12	Mar. 30	1215	H-C A *H *C *A H C P AM	6 4	VI - - - - -	12 2 17 3 8 3 272	1.51 2.34 4.36 4.93 5.88 3.27 4.84 19.3 20.8	1.50-1.54 2.17-2.55 4.00-4.66 4.93-4.92 5.50-6.38 2.73-3.56 3.34-6.34 16.0-24.0 12.0-35.0

^{*}Hatched aboard ship.

Table 8.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 72, March 21-31, 1956--Continued

	Tow		Number	Modal	Number	Average			
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range	
13	Mar. 31	0030	H-C	19	V	-	лл. 1.54	mm. 1.41-1.63	
			*H *C HE AM A	-	-	12 1 32 2 2	4.07 4.80 41.8 24.5 4.40	3.74-4.71 - 35.0-49.0 22.0-27.0 4.20-4.60	
			Ĥ	-	-	2	6.19	4.13-8.25	
14	Mar. 31	1135	*RO AM	-	-	1	2.20 6.02	-	

^{*}Hatched aboard ship.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 73, April 17-28, 1956

	Tow		0	Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	Apr. 18	0015	-	-	-	-	an. -	BB
2	Apr. 18	1215	H-C Y *H *C *A	4 2 - - -	VI V - - -	- 6 18 3 2	1.50 0.88 4.08 4.47 5.42 2.77	1.45-1.58 - 3.96-4.27 3.96-4.88 4.53-5.94 2.64-2.90
3	Apr. 19	0015	H-C *H *C P HE	17 - - - -	v - - -	21 2 2 2 7	1.48 4.13 4.73 18.0 42.7	1.41-1.54 3.74-4.49 * 4.40-5.06 14.0-22.0 38.0-47.0
4	Apr. 19	1215	H-C A *H *C *A	118 13 - -	v - - -	- 58 70 4	1.55 2.45 4.24 4.63 5.49	1.41-1.67 2.20-2.77 3.78-4.84 4.05-5.19 5.02-5.85
5	Apr. 20	0005	*H *A HE WO	-	-	1 1 5 13	4.31 5.37 40.0 22.8	31.0-44.0 22.0-24.0
6	Apr. 20	1220	-	-	-	-	-	-
7	Apr. 21	0015	H-C A *H *C *A HE AM	5 10 - - - -	V V - - -	12 7 25 5	1.54 2.46 4.17 4.33 5.54 43.6 32.0	1.50-1.58 2.29-2.68 3.92-4.58 4.05-4.58 5.06-6.07 41.0-46.0
8	Apr. 21	1215	*H *C *A	- - -	-	8 4 2	4.08 4.47 5.50	3.%-4.27 4.18-4.84 5.19-5.51
9	Apr. 22	0015	H-C Y *H *C *Y P	25 6 - - - -	- - - - - - -	75 10 13 1 6	1.47 0.86 4.15 4.28 2.79 50.0 22.0	1.41-1.54 0.79-0.92 3.61-4.66 3.48-4.62 2.42-3.12
10	Apr. 22	1220	-	-	-	-	-	-
11	Apr. 23	0015	*H *C *A *Y	-	= =	21 11 8 2	4.11 4.21 5.41 2.51	3.74-4.62 3.74-4.62 4.75-6.25 2.38-2.64

^{*}Hatched aboard ship.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 73, April 17-28, 1956--Continued

			110. 75,	APILL II-	20, 2770			
	Tow		Species	Number of	Modal stage	Number of larvae	Average diameter or length	Range
No.	Date	Time		eggs		THLANG	or rengui	
11 Cont.	Apr. 23	1215	*RO HE AM *H *C *A			3 3 1 4 1 1 3 2	2.16 48.0 12.0 3.92 4.49 5.41 4.36 23.0	2.16 44.0-52.0 - 3.52-4.58 - 3.58-4.76 21.0-25.0
13	Apr. 24	1215	H-C Y A *H *C *Y	19 11 1 - -	V VI - -	- - 19 1 23	1.40 0.85 2.11 3.76 4.36 2.59	1.28-1.54 0.80-0.88 3.12-4.53 - 2.20-3.04
14	Apr. 25	0015	H-C Y *H *Y H C HE	175 9 - - -	V V - - -	- 84 6 7 5	1.43 0.84 4.28 2.77 4.92 6.39 43.3	1.24-1.55 0.78-0.89 3.65-4.99 2.55-2.95 3.57-7.50 3.85-7.28 42.0-46.0
15	Apr. 25	1215	H-C Y CU *H *C *Y *A *CU *SPH	45 4 1 - - - -	V V V - - - -	- - - - - - - - - - - - - - - - - - -	1.44 0.85 1.40 4.09 4.28 2.87 5.85 4.05 37.0	1.33-1.54 0.80-0.88 - 3.17-4.66 3.96-4.84 2.73-2.95 5.37-6.38
16	Apr. 26	0015	H-C A CU *H *A *CU *C HE	101 7 5 - - - -	V V - - - -	23 14 5 1	1.46 2.32 1.34 3.72 5.07 4.15 4.27 46.2	1.37-1.63 2.22-2.42 1.29-1.41 3.21-4.13 4.31-6.25 3.96-4.22 43.0-48.0
17	Apr. 26	1215	H-C A *H *C *A *CU	64 11	V V - - -	22 2 15	1.47 2.31 3.83 4.35 4.68 4.14	1.41-1.63 2.16-2.73 3.43-4.31 4.31-4.40 4.14-5.06
18	Apr. 27	1215	H−C A *H	30	VI VI	- - 55	1.39 2.29 4.07	1.29-1.47

*Hatched aboard ship.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 73, April 17-28, 1956--Continued

	Tow		Species	Number	Modal	Number	Average	Range	
No.	Date	Time		eggs	stage	larvae	diameter or length		
18 Cont.			*C *Y *A		-	10 3 2	4.42 2.86 5.19	3.96-4.80 2.82-2.90 5.10-5.28	
19	Apr. 28	0005	*H *Y *WF	- - -	- - -	3 1 1	4.09 2.86 4.75	3.65-4.58 - -	
20	Apr. 28	1200	*H *A AM P SC		-	3 1 4 40 1	4.11 5.98 26.5 14.6 14.0	3.74-4.49 23.0-29.0 10.0-23.0	

^{*}Hatched aboard ship.

Table 10.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 75, May 16-29, 1956

	Tow		Species	Number of	Modal	Number	Average	Pongo
No.	Date	Time	Species	eggs	stage	of larvae	diameter or length	Range
1	May 17	0015	*WF *CU H RH C	- - - -	- - - -	3 3 6 1	4.90 3.89 4.70 7.80 6.70	4.80-4.97 3.83-3.96 3.00-6.20
2	May 17	1215	MU	-	-	1	12.0	-
3	May 18	0015	*H *C *Y *CU HE WH	- - - - -	- - - -	2 1 6 1 3 1	4.09 4.66 2.69 4.00 47.0 53.0	3.96-4.22 2.38-2.95 42. 0-50.0
4	May 18	1220	*H P SC	- - -	-	1 2 1	3.78 23.5 16.0	21.0 -26.0
5	May 19	0015	*H *RO *A P	- - - -	- - - -	12 2 1	4.07 1.94 4.75 30.0	3.96-4.22 1.85-2.02 -
6	May 19	1215	P WO	-	-	1 2	26.0 26.0	23.0 -29.0
7	May 20	1215	*H *RO *A LF	-	- - -	1 1 1 2	3.96 2.07 4.75 31.5	- - - 25.0 -38.0
8	May 21	0020	H-C A RO *H *C *A *Y *RO *CU *WF AM HE	16 4 12	V V V 	- - 8 3 7 28 20 2 2 2 34 2	1.42 2.12 0.83 3.94 4.08 4.86 2.72 1.95 3.46 4.36 20.9 33.5	1.26-1.54 1.98-2.16 0.79-0.87 3.70-4.14 3.74-4.40 4.49-5.41 2.38-3.08 1.80-2.33 3.21-3.70 4.09-4.62 10.0 -28.0 32.0 -35.0
9	May 21	1220	RO *RO *CU	20 - -	v - -	57 1	0.83 2.07 3.52	0.74-0.88 1.80-2.42
10	May 22	0015	*H *CU WH	- - -	- - -	14 6 4	4.08 3.99 45.8	3.56-4.75 3.34-4.66 43.0 -48.0

^{*}Hatched aboard ship.

Table 10.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no, 75, May 16-29, 1956--Continued

	Tow		Species	Number of	Modal.	Number of	Average diameter	Pange
No.	Date	Time	Species	eggs	stage	larvae	or length	Range
11	May 22	1215	*H *CU	-	-	1 2	**. 3.61 4.16	er. - 4.05-4.27
12	May 23	0020	*H *RO WH	- - -	- - -	11 1 1	4.07 1.89 44.0	3.77-4.48 - -
13	May 23	1220	*Y *RO P	-	- - -	2 2 2	2.73 1.92 24.5	2.55-2.90 1.85-1.98 21.0 -28.0
14	May 24	1215	RO *RO *WF *C *Y C	10	V	16 8 1 2 3 23	0.84 2.07 4.81 3.74 2.80 6.50 7.93	0.75-0.89 1.89-2.29 4.40-5.02 - 2.73-2.86 4.70-8.70 6.30-10.0
15	May 25	0020	H Y RO *H *Y *RO	7 11 1 - -	V V II	- - - 4 11 1	1.41 0.85 0.84 4.11 2.74 2.07	1.36-1.45 0.82-0.92 - 4.05-4.18 2.42-2.99
16	May 25	1215	*Y *RO	-	-	3 1	2.87 2.11	2.77-3.08
17	May 26	0015	C H WH Y	- - -	- - -	43 53 1 2	8.06 6.71 27.0 7.42	6.60-9.90 4.95-8.85 - 5.55-9.30
18	May 26	1215	*Y H	-	-	8 4	2.70 6.00	2.42-2.95 4.35-6.90
19	May 27	0015	RU MU LA RH U SU		- - - -	1 1 4 1 1 1 1	39.0 25.0 24.5 22.0 14.0 22.0	23.0 -27.0
20	May 27	0810	*SH *WF BU SR H M		-	15 1 1 2 1 1	2.91 4.58 18.0 10.5 10.8 32.0	2.73-3.12
21	May 29	0015	H WH	-	-	7 9	22.4 53.3	16.0 -29.0 40.0 -63.0

^{*}Hatched aboard ship.

Table 10.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albaross III cruise no. 75, May 16-29, 1956--Continued

	Tow		Species	Number	Modal	Number	Average		
No.	Date	Time	eggs		stage	of larvae	diameter or length	Range	
22	May 29	1020	CN RO *CN *RO *M P	57 6 - - -	V II - - -	- 47 3 4 1	0.90 0.78 3.15 2.23 3.62 21.0	0.83-0.97 0.75-0.83 2.68-3.43 2.20-2.29 3.30-3.83	

^{*}Hatched aboard ship.

Table ll.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 76, June 11-24, 1956

	Tow			Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	June 12	0000	U U W *U *U *U MU MU NE U	13 2 2	V V V - - - -	- 3 23 3 2 1	0.78 1.19 0.75 2.56 1.92 1.95 24.0 23.0 7.05	0.75-0.84 1.06-1.32 - 2.46-2.68 1.58-2.20 1.76-2.07 23.0-25.0
2	June 12	1215	RU MU WH U PU	- - - -	- - - -	1 1 1 1	32.0 23.0 20.0 13.0 13.0	-
3	June 13	0015	WH C	-	-	1 5	30.0 13.0	11.0-16.0
4	June 13	1215	CU Y *WF *RO *CU *Y	19 1 - - -	IV - - - - -	- 3 1 1	1.27 0.81 5.28 2.07 3.34 3.21	1.20-1.36
5	June 14	0015	P	-	-	1	33.0	-
6	June 14	1215	WF RO *WF *RO	35 22 -	V V - -	18	1.25 0.79 5.07 1.98	1.16-1.34 0.75-0.81 4.58-5.46
7	June 15	0015	LF HE P	- - -	- - -	2 12 2	34.5 42.4 27.0	27.0-42.0 38.0-47.0 25.0-29.0
8	June 15	1215	RO *RO *WF	6 - -	IV - -	- 1 1	0.83 2.29 5.10	0.79-0.88
9	June 16	0015	LF AM WH	-	- - -	1 6 30	35.0 43.8 49.7	32.0-51.0 38.0-68.0
10	June 16	1215	RO CU *RO *CU *M RH	34 29 - - -	IV III - - -	34 9 2 1	0.80 - 1.82 3.69 3.16 36.0	0.75-0.85 - 1.63-1.98 3.52-4.05 3.12-3.21
11	June 17	0015	CU RO	14 5	V V	-	1.27 0.81	1.15-1.32 0.75-0.85

^{*}Hatched aboard ship.

Table 11.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 76, June 11-24, 1956--Continued

	Tow			Number	26.3.2	Number	Average	
No.	Date	Time	Species	of eggs	Modal stage	of larvae	diameter or length	Range
ll Cont.			*CU *WF *H *RO		-	10 2 2 2 3	4.10 4.62 3.26 2.02	3.60-4.62 - 1.89-2.20
12	June 17	1215	CU U *CU *RO *G *Y *CN	13 68 22 - - -	III IV III - - -	- - 3 1 1 1	1.25 1.25 0.78 3.74 1.76 2.99 3.04 3.26	1.19-1.36 1.19-1.36 0.75-0.88 3.52-4.27
13	June 18	0015	Y *Y RH SY H	12	- - - -	35 2 1	0.85 2.70 40.5 9.0 5.25	0.81-0.87 2.51-3.08 39.0-42.0
14	June 18	1220	WF RO *WF *RO *CU *RH *Y C	4 2 - - - -	-	- 2 4 1 2 3	1.29 0.80 4.71 2.01 3.96 1.92 2.82 9.15	1.23-1.36 0.76-0.84 4.58-4.84 1.94-2.11
15	June 18	2220	WF RO RH *WF *RO *RH *CU *CU *CN SB RH Y C H	3 15 1	IV III V	- - 4 19 4 1 2 7 1 6 1	1.26 0.81 0.70 4.62 1.95 1.96 4.05 2.64 23.1 51.0 12.1 7.8 5.0	1.24-1.29 0.78-0.84 - 4.18-5.06 1.76-2.20 1.76-2.07 - 21.0-29.0 - 9.6-13.8
16	June 19	1215	CU RH RO *CU *RH *RO	1 15 10 - -	IV V - -	- - 1 18 16	1.37 0.70 0.82 3.83 1.93 1.96	0.67-0.71 0.80-0.87 - 1.80-2.02 1.72-2.11
17	June 20	0010	CU WH	14	<u>-</u>	2	1.28 31.5	1.23-1.40 30.0-33.0

^{*}Hatched aboard ship.

Table ll.--Stages and sizes of fish eggs and larvae taken with 1-meter net on $Albatross\ III$ cruise no. 76, June 11-24, 1956--Continued

	Tow			Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
18	June 20	1210	-	-	-	-	##. -	ma.
19	June 21	0015	HH* *M Y	-	-	2 1 194	1.90 2.86 7.26	1.85-1.94 - 4.65-14.25
20	June 21	1215	SH RH CN U U U *SH **RH **CN **U **U **U **U **U **U **U	14 10 1 8 10 2 - - - -	V V V V V V V V V V V V V V V V V V V	- - - 34, 44, 2 16, 2 20,	0.92 0.69 0.92 0.97 0.72 0.75 2.94 1.93 2.88 2.83 2.11 2.02 2.86	0.88-0.97 0.65-0.71
21	June 22	0015	RH U U *RH *U *U WH SH RH	44 31 16 - - - - -	V V - - - - - -	- - 54 25 8 5 278 1	0.70 0.70 0.74 2.00 1.94 2.80 37.4 5.73 9.0 8.4	0.66-0.74 0.66-0.73 0.88-0.97 1.80-2.11 1.67-2.20 2.51-3.08 30.0-4.5.0 3.0-8.2 6.0-12.0
22	June 22	1215	U *U *U *U *U *U *U *U CU	38 30 - - - -	TI	33 21 3 1 2	1.31 0.77 3.03 2.10 1.91 4.31 29.5 5.0	1.23-1.33 0.74-0.83 2.73-3.21 1.94-2.24 1.76-2.02 28.0-31.0
23	June 23	0015	RH SH U *RH *SH *U RO	30 2 1 - -	V V	- - 42 9 2	0.70 0.86 0.97 2.09 2.96 2.82 8.7	0.67-0.73 0.85-0.86 - 1.89-2.29 2.73-3.12 2.77-2.86 6.6-11.5
24	June 23	1215	RH SH *RH *SH *U	20 1 - -		- 54 2 1	0.70 0.86 2.10 3.04 2.77	0.67-0.74

^{*}Hatched aboard ship.

Table 11.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 76, June 11-24, 1956--Continued

	Tow		Species	Number	Modal	Number	Average diameter	Range
No.	Date	Time	Species	eggs	stage	larvae	or length	Mange
24 Cont.			RO	-	-	1	mm. 12.5	P.R.
25	June 24	0140	CN SH U U V **CN **SH **U WH RO G CN WIF MH SSN WIF MH S RH SH U U U	35 4 27 24 7 - - - - - - - - - - - - - - - - - -	V V V 	- - 11 3 42 3 1 1 2 1 16 4 1 1 2 7 45 27 1 44 44 18	0.84 0.94 0.68 0.77 0.93 2.64 2.74 2.05 2.54 1.89 36.0 8.5 7.0 2.54 3.00 7.0 7.0 5.88 2.61 1.51 2.46 2.8 1.61 1.77 2.29	0.78-0.89 0.92-1.02 0.63-0.71 0.74-0.80 0.88-0.97 2.38-3.04 2.64-2.86 1.85-2.20 2.42-2.77

^{*}Hatched aboard ship.

						Surrac	e 					
Loading	Gauze	Species				eggs d stag				La	rvae	
number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
1	1 2 3	-	1 1 1	-	-	-	-	-	U AM AM	1 1 1	mm. 4.4 18. 9.7	mm. - -
	4-36 37-60 61 62 63	- - - -			-	-	-	- - - -	- AM HE U	- 1 1	15.6 50	-
	64 65 66 67 68 69	- - - н - н			1 - 1	-	-	-	AM HE - -	1 1	10 50 -	-
	70 71 72 73-82	н - н -	1 1 1	1 1 1 1	1 - 1 -	-	-	-	- - -	-	-	-
2	1-24 25-30 31 32 33 34	- H H -			- 1 1 -	- - 1 -	-	-	-	-	-	-
	35-39 40 41 42-44 45-63 64-84	н н - -	-	- 1 - -	1 - -	-	-	-	-	-		-
3	2-30 34 35 36-45 47-48 49 50	- H - - H		1	1 - 2 1				-	-	-	-
	51 52 53	H C H C H		- 1 1 1	3 1 3 - 2	-	-		AM - AM	1	- 17 - -	-
	54 55 56 57	H C H C		2 2 1	2 3 1	- 3 - 1 1	- - 1	1 - -	- - - -	- - -	-	-
	59 - 61 62	- H	-	-	1	=	1	- 1	- AM	- 1	14.5	=

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 71, February 20-March 2, 1956--Continued

						illace						
Loading	Gauze	Species				eggs				La	rvae	
number	section	ф	I	II	III	IV	v	VI	Species	Number	Length	Range
											mm.	mm.
3 Cont.		С	_	_	_	_	1	_	_	_	_	-
COII C.	63	H	-	1	-	_	-	2	-	-	-	-
		C	-	-	1	1	-	-	-	-		-
4	1-4	_	_	_	_	_	_	_	_	_	-	_
·	5	-	-	-	-	-	-	-	HE	3	45.3	40-48
	6	-	-	-	-	-	-	-	HE	1	50 50	-
	7 8-27	_	_	-	_	_	_	_	HE -	-	-	_
	28	Н	-	1	-	-	-	-	-	-	-	-
	30-45	-	-	-	-	-	-	-	-	-	-	-
	46 47	- Н	-	-	1	_	_	_	HE -	1 -	50	_
	48	-	_	_	_		_	_	_	-	-	-
	49	-	-	-	-	-	-	-	HE	2	37.5	35-40
	50	-	-	-	-	-	-	-	HE	1	35	-
	51 52	_	_	-	-	_	-	-	HE	2	36.5	30-43
	53	-	_	-	-	-	_	_	-	-	-	-
	54	-	-	-	-	-	-	-	HE	2	42.5	40-45
	55	-	-	-	-	-	-	-	HE	3	40.0	-
	56-59 60	-	_	-	_	-	_	_	AM	2	_	_
			1			77.1				1	1	1
	1			1	10	Meter	3 T					Т
1	2	_	_	_	_	_	_	_	AM	2	18	14-22
-	3	-		-	-	-	-	-	AM	1	8.8	-
		-	-	-	-	-	-	-	U	4	5.0	-
	4 5	_	_	-	_	-	_	_	HE AM	5 1	23.6	15-35
		_	_	-	-	-	_	_	Ü	l î	-	_
	6	-	-	-	-	-	-	-	AM	1	13	-
	7	_	_	-	-	-	-	_	HE AM	1	18	-
	/	_	-	-	1 -	-		-	HE	l i	-	
		-	-	-	-	-	-	-	U	2	-	-
	8	-	-	-	-	-	-	-	HE	1	-	-
	9 - 26 27	_	-	-	_	-	-	_	HE	1	_	
	28-42	_	-	_	_	-	-	_	-	-	-	-
	43	-	-	-	-	-	-	-	AM	2	10.5	10-11
	44	-	_	-	_	-	_	-	HE	1	40	_
	46	H	_	_	1	_	_	-	HE	ī	-	_
	47-48	-	-	-	-	-	-	-	-	-	-	-
	49	H	-	-	1	-	-	-	-	-	-	-
	50 - 52	- н	-	_	_	1	-	-	_	_	_	_
	54-61	-	_		_	-	-			-	-	_
	62	-	-	-	-	-	-	-	HE	1	32	-
	63	-	-	-	-	53	1 -	-	1 -	-	-	-

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 71, February 20-March 2, 1956--Continued

10 Meters

						IO WAS						
Loading number	Gauze	Species				f eggs ed stag				Larv	ae	
number	section		I	II	III	IV	_ V	VI	Species	Number	Length	Range
2	1-26 27-51 52-75 76 77	- - н			- 1	-	-	-	,	-		mm.
3	1-35 39-45 46 47-51 52 53-58 60-72 73 74 75 76	- - - - - - - - - - - - - - - - - - -	-		1 1 1 3 1 1 1 2 2	1 - 2 5 1 - 4 1 1 1		-	-	-	-	
4	78 79 81 82 83 84 85 86 87	H H C H H H H	-		1 1 2 1	1 3 1 - 1 1 1 1	-			-		-
	14 15-18 19 20 21 22 23 24-32 34-50 51 52 53 54 55 56-58 59 60 61 62 63	- - - - - - - - - - - - - - - - - - -		1			1		HEE - HEE - HEE - HEE		3.3	3.0-3.6
	64 - 65 66	-	-	- -	-	-	-	-	_ _	1	-	

Cause section Species Species Tarvas Species Tarvas Tarvas					k/s	mbon c	e ogge						
1			Species								Larva	ie	
1 1-6	Humber	Bec 01011		I	II	III	IV	V	VI	Species	Number	Length	Range
7												mm.	mm.
8-21	1			-	-	-		-	-	-	-	-	-
23-39							}						
40							i						
41 43-52 53 H 54 H													_
53									-			-	_
54		43-52	-	-	-	-	-	-	-	-	-	- i	-
55				-	-	-		-	-				-
56													
56		55					}						
57		56				-							
S8							i .						
59				_	-	-		1	ļ.	_		_	-
61			Н	-	-	-	-		-	-	-	-	-
61 62-68		59				1	i		1			1	
62-68 69 H 70					}	1			1				
2 1-21					1	l .							
70 71 72-85					í					_			_
2 1-21					1		1			_			_
2		71	Н	-	-	-	-	1	-	_	-	-	-
22		72-85	-	-	-	-	-	-	-	-	-	-	-
22										İ			
23-34 36-56 61-64 65 H	2									1			
36-56 61-64					í					1	1		_
61-64										1	1		
66			-	-	-	-	_	_	-	-			
67				-	1	2	-	-	-	-	-	-	-
68										1			-
69			1				I		1				
70			1	1				1	1	1	1		
71 72 H								ĺ		i	1		_
73-74 75 76-86 U 1				_	_				ì		1	1	_
75 76-86 1 1 1 1 2 H			H	-	-	1	-	-	-	-	-	_	-
3 1			-	-	-	-	-	-	-	-		-	-
3 1 1 1						1			-	U	1	-	-
2 H 1		76-86	~	-		-	-	-	-	-	-	-	-
3	3				-			-	-	-	-	-	-
4 H 2							1		l .				
5			4					1	l .				-
6-9				1							I.	1	
10 H 3 1 11 12-17 1				1		l .		l	1				
12-17 18 H 1		10)			1	Į.	1				
18 H 1					-		-	1	-	-	~	-	-
19-22					1								-
													-
					1					1			_

Table 13.--Stages and sizes of fish eggs and larvae taken with the maxuyton Recorder on Albatross III cruise no. 72, March 21-31, 1956--Continued

Loading	Gauze	Species			mber of indicat	eggs ted sta	age			Larv	ae	
number	sectio.		I	II	III	IV	V	VI	Species	Number	Length	Range
3											mm.	mm.
Cont.	24-27	-	_	-	-	-	-	-	-	-	-	-
	29-51	-	-	-	-	-	-	-	-	-	-	-
	52	Н	-	-	1	-	-	-	-	-	-	-
	53	H	-	1	1	-	-	-	-	-	-	-
	54	H	-	-	-	1	3	-	-	-	-	-
		C	-	-	1	1	1	_	-	-	-	_
	55 56	H	_	2	2		- L	_	_	_	_	_
	20	C	_	_	_	-	1	_	_	_	_	_
	57	H	_	1	2	1	ı	_	_	_	_	_
	1	C	_	_	ĩ	_	Ī	-	-	-	_	-
	58	Н	_	1	_	1	2	-	_	-	-	-
		C	-	-	1	1	-	-	-	-	-	-
	59	Н	-	-	2	1	-	-	-	-	-	-
		C	-	1	-	-	-	-	-	-	-	-
	60	C	-	-	-	1	-	-	-	-	-	-
	61	Н	-	-	-	1	-	-	-	-	-	-
		C	-	-	2	1 .	-	-	-	-	-	-
	62	C	-	-	-	-	1	_	-	_	_	-
	63	-	-	-	1	-	_	-		_	_	_
	64 65	C	-	_		-	1	_		-		_
	66	_	_	-		_		_		_	_	
	67	C	_	_	_	_	1	_	_	_	_	_
	68	_	_	_	_	-	_	_	Н	1	8.0	-
	69	-	-	_	-	-	-	-	-	-	-	-
	70	C	-	-	-	1	-	-	-	-	-	-
	71	C	-	-	1	-	-	-	-	-	-	-
	72	C	-	-	-	1	-	-	-	-	-	-
	73-76	-	-	-	-	-	-	-	-	-	-	-
	77	C	-	-	1	-	_	_	_	_	_	_
	78	-	-	-	-	_	_	_	AM	1	11.0	-
	79 80 - 89	_	_	_	_	_	-	-	AIVI -	-	11.0	_
	90	н	1	1	_	_	-	-	_	-	-	-
	91	H H	_	1	1	-	-	-	_	-	-	-
	92	-	-	-	-	-	-	-	-	-	-	-
4	1-2	_	_	-	_	_	_	-	_	_	-	_
	3	_	-	-	-	-	-	-	Н	1	-	-
	4-9	-	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	C	2	3.61	-
	11-15	-	-	-	-	-	-	-	-	-	-	-
	16	Н	-	-	-	1	3	1	-	-	-	-
	2.00	C	-	-	-	-	1	1	-	_	-	_
	17	Н	-	-	-	-	2	4	_	_	_	_
	10	C H	1	1	-	-	3	3		-	_	1 -
	18	C	_		-	1	4	-		_	_	_
	19	H	_	_		1	3	-	_	-	_	-
	17	C C	1	1	-	1	-	_	-	-	-	_
	20	H	-	2	-	1	-	-	-	-	-	-
		Č	_	_	_	1	_	-	-	-	_	_

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 72, March 21-31, 1956--Continued

						Dullac						
Loading	Gauze	Species			mber c indica					Larva	e	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
4 Cont.	21	Н	-	_	-	1.	-	1	-	-	mm. -	mm.
	23 - 31 32	- H	_	3	-	-	1	_		_	_	_
		С	-	1	-	-	-	-	-	-	-	-
	33	H C	-	-	_	3	2	-	_	-	_	_
	34	H	-	_	_	_		2	_	_	_	-
	35	H	-	_	1	1	1	ĩ	Н	1	3.6	-
		С	-	-	-	1	-	-	-	-	-	-
	36	Н	-	-	-	1	1	1	_	-	_	-
	37	C H	_	_	1 3	-	_	_ _	_	_	_	_
	21	C	_	_	i	_	_	_	_	-	-	-
	38-39	-	-	-	-	-	-	-	-	-	-	-
	40	Н	-	-	1	-	1	1	-	-	-	-
	41	- н	-	-	-	1	-	_	_	-	_	_
	43-52		_	_	_	_	_	_			_	_
	53	-	-	-	-	-	-	_	С	1	7.0	-
	54	-	-	-	-	-	-	-	-	-	-	-
	55 56	H	-	-	2	-	1	_	-	_	_	-
	57 - 59	H -	_	_	_	-	_ _	_	_	_	_	_
	61-76	_	_	_	-	_	_	-	_	_	-	-
	77	Н	-	-	-	-	1	-	HE	3	45.3	43.0-48.0
	78	-	-	-	-	-	-	-	-	-	-	-
5	73	_	_	_	_	_	_	_	_	_	_	_
	74	_	-	_	_	_	_	_	HE	1	35.0	-
		-	-	-	-	-	-	-	U	1	-	-
	75	H	-	-	-	1	-	-	-	-	-	-
	76 - 77	_	-	_	_	_	_	_	HE	1	38.0	-
	79-84	_	-	-	-] -	_		nr.		30.0	_
	85	-	-	-	-	-	-	-	AM	1	20.0	-
	86-87		-	-	-	-	-	-	-	-	-	-
	88	H	-	-	-	_	2	2	_	_	_	_
	09	n	<u> </u>		<u> </u>			-		<u> </u>	<u> </u>	
]	.0 Mete	ers					
1	1-2] [-	_	-	_	_	-	AM	1	5.5	-
	4		-	_	-	_	_	_	AM AM	1	4.6	_
	5	-	-	-	-	-	-	-	HE	1	-	-
	6-12	-	-	-	-	-	-	-	-	-	-	-
	15-24	_	-	-	-	-	-	-	-	-	-	-
	26 - 35 36	Н	-	-	-	-	1	1	_	_	_	-
	37	-	-	-	-	-	-		_	-	-	_
	38	Н	-	-	-	-	-	1	-	-	-	-
	39	Н	-	-	-	2	3	-	-	-	-	-
		C	-	-	-	1	1	-	-	-	-	-

10 Meters

					10) Meter	'S					
Loading	Gauze	Species				of eggs ted sta				Larv	rae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
l Cont.	40	H C	-	-	-	3	-	-	HE	1	mm. -	mm. -
	41	Н	-	-	1	-	-	-	HE	1	-	-
	42	A H	_	-	-	3	1	1	- Н	1	4.8	_
	45	C H	-	-	-	1 -	1	-	_	_	_	-
	46	H C	-	-	1 -	-	1	-	-	-	-	-
	47	Н	-	-	1	-	-	-	-	-	-	-
	48	H C	_	_	1 -	1	_	_	-	_	-	_
	49	H C	-	-	2	6	-	-	-	-	-	_
	50	H C	-	-	1		1	-	-	-	-	-
	51	Н	-	_	3	_	_	_	_	-	_	_
	52-53	C _	-	_	1 -	-	_	-	-	_	_	_
	54 55 - 61	Н –	-	-	1 -	-	-	-	_	-	-	-
	62	Н	-	-	1	-	-	-	-	-	-	-
	63-72	_	-	-	-	-	-	-	-	-	-	-
2	4 - 21 22	- н	-	- 1	-	-	-	-	-	-	-	_
	23	-	-	-	-	-	-	-	-	-	-	-
	24 25	н –	-	-	1 -	-	_	_	_	-	-	_
	26 27 - 34	H	-	-	1	-	-	-	-	-	-	_
	36-44	-	-	-	-	-	-	-	-	-	-	-
	45 46 -5 5	-	-	-	-	_	-	_	HE -	-	1 -	38.0
	62 - 67 68	- н	-	1	-	1	-	-	-	-	_	_
	69 70 - 86	Н _	-	-	-	1 -	-	-	-	-	-	-
	87	H	-	-	1	_	-	_	_	-	_	-
3	1-7	_	_	_	_	_	_	_	_	_	_	-
	8	H H	-	-	1	-	-	-	-	-	_	_
	10	H	-	-	2	-	-	-	-	-	-	-
	11-12	-	-	-	-	_	_	-	_	_	-	-
	13 14 - 24	H -	-	-	1 -	-	-	_	-	_	-	_
	27 - 45 46	- Н	-	-	1	-	-	-	-	-	-	-
	47	-	-	-	-	-	-	-	-	-	-	-
	48 49	H H	_	1	1 -	1 -	_	-	_	_	_	_

10 Meters

					10	Meters	5					
Loading	Gauze	Species			umber o					larv	rae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
3 Cont.	50 51 52 53 54 55 56 57 58 59 62 63 64 65-66 67 68 69 70 71-76 77 78-81 82 83-84 85 86	Н С Н С Н С Н С С С С С Н С - Н Н Н Н		1 1 2 6 2 4 1 1 2 1 1 1 1 1 1 1 1	1 1 2 3 1 1 1 2 3 1 2 3 1 2 2 3						mm	mm.
4	87 88 1-4 5 6 7 8 9 10 11 12-14 15 16 17	H H - - - - H - - - C A H C		1 - 1 2 1 1 1	1 2 - 2		1		- AM AM HE - U - U U	1 2 1	30.0	

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 72, March 21-31, 1956--Continued

10 Meters

Loading	Gauze	Species		in	humber indica	of egg: ted st	s age			Lar	vae	
number	section	*	I	II	III	IV	V	ΛΙ	Species	Number	Length	Range
4 Cont.	21-23	-	-	-	-	-	-	-	-	-	mm. -	mm.
	24 26-29 30 31	н - н н	-	- - - 1	1	1	-	-	-	-	-	-
	32 33 34	н - н	-	-	-	-	-	1 - 2	-	-	-	-
	35-36 59 60	-	- - -	- - -	-	- - -	- - -	- - -	- Н С	1	3.7 4.9	- - -
	61 62 63 - 70	Н -	-	-	-	-		1 -	-	-	-	-
	71 72 73 74	Н Н — Н	-	1 - 1	-	1 -	-		-	-	-	
5	75-76	- -	-	-	-	-	-	-	_	-	-	-
	77 -7 8 79 80	-	-	-	-	-	-	-	HE	1	-	-
	81 82 83	Н - Н	-	-	-	- - 1	1 - -	-	- - HE	- - 1	30.0	-
	84 85 86	H - RO	-	-	-	- 1	2	-	- - H	- - 1	- 4.4	- - -
	87 88 89 - 90	H H	- -	-	-	-	2 -	1	H	1 -	3.3	-

						A11100						
Loading	Gauze section	Species			umber o					Larv	ae	
number	section		I	II	III	IA	v	VI	Species	Number	Length	Range
											mm.	mm.
1	1 2	-	-	-	-	-	-	-	-	-	-	-
	3	Н -	-	_	_	1 -	_	_	U -	1 -	_	
	4	-	-	-	-	-	-	-	AM	1	25	-
	5 6	- H	_	_	_	_	1	-	AM AM	1 3	30	-
	7	-	_	_	_	-	_	_	- Alvi	-	_	_
	8	-	-	-	-	-	-	-	W	1	35	-
	9 10	_	-	_	-	_	_	_	- AM	1	36	-
	11-15			_	_	_		_	Alvi –	-	-	_
	16	U	4	1	-	-	-	-	-	-	-	-
	17 - 21 24 - 30	_	_	_	-	-	_	-	_	_	_	-
	31	H			_	_	1	_	_	_	_	_
	32-45	-	-	-	-	-	-	-	-	-	-	-
	47 - 53 54	-	_	-	-	-	-	-	c	1	5.7	-
	55	_	_	_	_	_	_	-	-	_	2.7	_
	56	Н	-	-	-	-	-	1	C	1	5.3	-
	57 58 - 60	Н _	-	_	-	-	1	_	C -	2	6.5	6.4-6.6
	61	H		_	-	_	1	_	_	_	_	_
	62-63	-	-	-	-	-	-	-	-	-	-	-
	64 65	H -	_	_	-	-	1	-	HE	- 1	- 45	-
	66	_		_	_	-	_	_	HE -		45	-
	67	Н	-	-	1	-	-	1	-	-	-	-
	68 70 - 77	_	-	-	-	-	-	-	-	-	-	-
	78	н		_	1	_	_		_	_	_	_
	79-82	-	-	-	-	-	-	-	-	-	-	-
	83 84	H H	-	_	1	1	-	-	-	-	-	-
	04	C	=	_	1	_	_		_	_	_	-
	85	C	-	-	-	-	1	-	-	-	-	-
	86 87	— Н	_	-	_	1	_	_	-	-	-	-
	0,	c c	_	_	_	ı	1	_		_	_	-
	88	Н	-	1	-	-	1	-	-	-	-	-
	89	C H	-	1 -	1	1 -	_	-	-	-	-	-
	٠,	c	-	-	-	1	_	_		_	_	-
	90	Н	-	-	1	1	-	-	-	-	-	-
		С	-	-	1	1	-	-	-	-	-	-
2	1-8	_	_	_	-	-	_	_	-	_	_	_
	9	-	-	-	-	-	-	-	₩	1	29	-
	10 -1 5	_	-	-	_	-	-	-	HE	1	- 35	-
	17	_	-	-	_	_	_	-	W.	1	23	-
	18	-	-	-	-	-	-	-	-	-	-	-
	19	A	1	l -	l -	-	-	-	HE	1	40	-

Loading	Gauze	Species				of egg				Iarv	ae	
number	50001011		I	II	III	. IA	v	ΔI	Species	Number	Length	Range
number 2 Cont.	20 22-29 30 31 32 33 34 35 36 37-42 44 45-56 \$7 58-63 64 66-69 70 71 72 73 74 75 76 77 78 79 80 81-82 83		1	II	III	1 IV	V		Species		mm	mm.
	84 85 86	H C U H C	- - 1	1 1 1	1	- - - 1		- - - -	-	-	-	-
3	1 2 3-9 10 11 12-13 14 15 16-18 20	- H H H - H H	1	1 - 1	-		1	1		-	-	

						burrac	C					
Loading	Gauze	Species				of egg				Larv	ae	
number	section		I	II	III	IV	V	ΛΙ	Species	Number	Length	Range
3 Cont.	21	Н	_	_	_	-	1	_	-	_	mm. -	mm. -
	22-38	-	-	-	-	-	-	-	-	-	-	-
	40 - 42 43	- H	1	3	_	_	-	_		_	-	
	44	H	-	1	-	_	-	_	_	_	-	_
	45-46	-	-	-	-	-	-	-	-	-	-	-
	47	H	-	2	1	-	-	-	HE	1	37	-
	48-49	A -	-	-	_	1 -	_	_	_	_	-	_
	50	н	ı	_	_	_	_	_	_	_	_	_
		A	-	-	-	1	-	-	-	-	-	-
	51		-	-	-	-	-	-	AM	1	20	-
	52 53	H H	-	-	_	1 -	1	_	_	_	_	_
	54	- "		_	_	_	_	_	HE	1	40	_
	55-56	-	-	-	-	-	-	-	-	-	-	-
	57	Н	- 1	-	-	-	1	-	-	-	-	-
	58 - 59 62 - 63	-	-	_	-	_	_	_	_	_	-	_
	64	H	_	1	_	_	_	-	_	_	_	_
	65-75	-	-	-	_	-	-	-	-	-	-	-
	76	-	-	-	-	-	-	-	AM	1	31	-
	77 78	_	-	_	_	-	_	_	- AM	1	24	-
	79		_	_	_	_	_	_	Zuvi		_	_
	80	-	-	-	-	-	-	-	AM	2	25	-
	81	-	-	-	-	-	-	-		l -	-	-
	82	-	-	-	-	-	-	-	AM	1	41	-
4	1	-	-	-	-	-	-	-	AM	1	39	-
	2	-	-	-	-	-	-	-	AM	1	20	-
	3 4	H H	-	-	_	-	1	1 -	_	_	-	-
	5	Н	_	_	_	_	i	-	_	_	-	_
	6	Н	-	-	-	-	-	1	AM	1	25	-
	7 8	Н	-	-	-	-	1	-	AM	1	25	-
	9	H H	-	-	1	_	1	_	-	_	-	_
	10	-	-	-	_	_	_	_	_	_	_	_
	11	Н	-	-	-	1	-	-	-	-	-	-
	12 13	-	-	-	-	-	-	-	AM	1	25	-
	14	- Н	-	-	1	_	_	_	_	_	_	_
	15-17	-	_	_	_	_		_	_	_	_	_
	18	H	-	-	-	1	-	-	-	-	-	-
	19	H	-	-	-	1	-	-	-	-	-	-
	20 - 22 23	- Н	-	_	_	-	1	_	_	_	-	-
	24	Y	_	_	_	-	-	1	_	_	-	_
	25	Н	-	-	-	-	1	_	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-
	28 - 37 38	- Н	-	-		1	-	_	-	1 -	-	-

Loading	Gauze	Species		N in	umber indica	of eggs ted sta	age			Larv	ae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
4 Cont.	39 40 41 42 43-44 45 52-62 63 64 65 66 67-71 74 75 78 79 80 81 82 83 84 85 86 87 88 89 90 91				1	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 1 2 1 1 2 2 3 3 2 - 1 1 1 2 2 - 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 2 2 - 1 1 1 1		AM #		mm. 4.3	mm. 3.6-5.0
7	7-14 15 16 17 18 19-20 21 22 23 25 26 27 28 29 30	- H H - H H H - CU - CU	-		1 1 3 5 2	1 1 2 1						-

				S	urrace						
Gauze	Species								Larv	ae	
section		I	II	III	IV	V	VI	Species	Number	Length	Range
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56-57 58 59 60 62 63 64 65 66-67 68 69 70 71 72 73 74 75 76-81 83 84	Species H H H H H H H H H H H H H H H H H H	1		г —	Γ		VI	Species			Range
87 88 - 89	-	-	-	-	-	-	-	H -	1	3.7	-
	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56-57 58 59 60 62 63 64 65 66-67 68 69 70 71 72 73 74 75 76-81 83 84 85-86 87	31 H 32 H 33 H 34 35 H 36 H 37 38 H 39 H 40 CU 41 H 42 H 43 A 44 H 45 H 46 H 47 H 48 H 47 H 48 H 49 H 50 H 51 H 52 H 55 - 56-57 S 58 - 60 H 62 - 63 H 64 H 65 H 66-67 H 67 H 68 H 69 C 70 C 71 - 72 - 73 H 74 C 75 H 76-81 H 83 H 85-86 H 87 -	Section I	Gauze section	Gauze section Species I II III 31	Gauze section Species I II III IV	Gauze section Species I II III IV V 31	Gauze section I II III IV V VI	Species Species I II III IV V VI Species I III III IV V VI Species Species I III III IV V VI Species Speci	Species Species In indicated stage Iarv Species Number of eggs Iarv Species Number Iarv Species Species In indicated stage In indicated stage In IV IV IV Species Number Length	

Loading	Gauze	Species			Number indica					Larv	ae	
number	section		I	II	III	IA	v	VI	Species	Number	Length	Range
5 Cont.	90 91 92-94 95 96-97 98 99-100	н н - - -		-		1		1	- - AM - AM	1 - 2 -	mm. - - 27 - 28	mm. - - - - - 26-30
					10	Meter	rs					
1	1 2-8 9 10-21 25-43 46-49 50 51+52 53 64 65-66 69-76 77 78 79 80 81 82 83-84 85 86	- - - - - - - - - - - - - - - - - - -			1	2			HE - C H - H H - H H - H -	1	50 	35-38
2	1-20 22-28 29 30 31-34 35 36 37 38 39-40 41	- A H - H A - H	1	1 2 - 1	1		1	-	-			-

10 Meters

					10	Meter	'S					
Loading	Gauze	Species				of eggs ted sta				Larv	rae	
number	section		I	II	III	IA	V	VI	Species	Number	Length	Range
2 Cont.	42-43	-	_	_	_	_	_	_	_	_	mm.	mm.
	45 - 65	-	-	-	-	-	-	-	-	-	-	-
	68	H	_	_	-	1	-	_	_	-	_	_
	69-70	- H	-	- 1	1	-	-	-	-	-	-	-
	71	C	_	1	1	_	_	_	_	_	_	-
	72	Н	-	-	3	-	1	-	-	-	-	-
		CU	_	-	3	-	-	_	-	-	_	_
	73	Н	-	-	3	-	-	_	_	_	_	_
	74	C H	-	-	2	-	-	-	-	_	-	-
	7-4	C		_	-	1	_	_		_	_	_
	75	H C	-	-	-	1	-	-	-	-	-	-
	76	H		-	1 4	3		_	-	-	_	-
		С	-	-	3	1	-	-	-	-	-	-
	77 78	- Н	-	-	1	-	_	_	-	-	_	_
	79	-	-	-	-	-	-	_	_	_	_	_
	80 81 - 83	Н _	-	-	1 -	-	-	-	-	-	-	-
	84	Н		_	3	1	-	_	_	_	-	-
	de	C	-	-	2	-	-	-	-	-	-	-
	85 86	H H	_	_	1	_	-		_	_	_	_
	87-88	-	-	-	-	-	-	-	-	-	-	-
3	1-6	-	-	-	_	_	-	_	_	_	-	-
	7 8	Н -	-	-	-	-	1	-	-	-	-	-
	9	H	_	-	_	_	1	_		_	_	-
	10	-	-	-	-	-	-	-	-	-	- ,	-
	11 12	H H	1	_	1	1 -	_	_		_		_
	13-18	-	-	-	_	-	-	-	-	-	_	_
	20 - 39 41 - 46	-	-	_	_	-	-	-	-	_	_	-
	47	Н	_	-	1	_	_	_	c	1	4.7	-
	48 49	-	-	-	-	-	-	-	U	1	18	-
	50	-	-	_	-	-	-	_	AM -	1 -	12	-
	51	A	-	-	1	5	-	-	AM	1	11	-
	52	U H	_	-	1 1	_	_	_	-	_	_	-
	52	С	-	-	1	-	-	-	-	-	-	-
	53	H C	-	-	1	1 -	_	-	-	_	1	-
	54	H	-	-	î	-	-	-	_	_	_	_
	55	C -	-	-	-	1 -	-	-	-	-	-	-
	56	A	_	_	-	1	-	_	_	-	_	-

10 Meters

	_				10) Mete	rs					
Loading number	Gauze section	Species			umber (Larv	ae	
number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
3 Cont.	57 58 59	- Н Н С			- 1 -	2	1 1 1 1			-	mm. - - -	mm. - -
	60 61 62 65-66 67 68-76	А Н Н - - Н			1 1 - 1	3			-			-
	78 79 80-82 83 84 - 85	H - -			1		11111		- - - -	1 -	7.3	
4	1-3 4 5-9 10 11-20 21 22-23 24 25 27-41 42 43 44 45 46 48-50 51 52-63 64 65-66 69-77 78 79 80 81 82 83 84 85	- H - H - H - H - H - H - H - C H C H C				1			SC		5.8 5.1	

Table 14.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 73, April 17-28, 1956--Continued

10 Meters

					10	Me te i	. 5					
Loading	Gauze	Species			umber indica					Lar	vae	
number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
4											mm.	mm.
Cont.	86	H	-	1 -	1	-	-	-	-	-	-	-
	87-88	-	-	-	-	-	-	-	-	-	-	-
	89	Н	-	-	1	-	-	-	-			
5	1 2 -4	H -	-	_	1 -	-	_	_	-	-	_	-
	5 6 -1 0	H -	-	_	1 -	-	-	-	-	-	-	-
	11	Н	-	-	1	-	-	-	-	-	-	-
	12 - 13 14	- Н	-	-	3	-	_	_	-	-	-	-
	15 16	H H	-	-	3	-	-	-	-	_	-	-
	17	Н	1	1	-	-	-	-	-	-	-	-
	18 19	- н	-	_	2	-	-	-		_	_	_
	20 22 - 28	H	-	-	1 -	1 -	-	-	-	-	-	-
	29	A	-	_	-	-	1	-	-	-	-	-
	30 31	H H	_	-	1	-	-	_	_	_	-	_
	32 - 33 34	- н	1	-	-	-	-	-	-	-	-	-
	35	_	-	-	-	-	_	-	-	-	-	-
	36 37	H H	_	_	1 2	-	-	-	-	_	_	_
	38 39	-	-	-	-	-	-	-	LA	1	42	-
	40	-	-	-	-	_	_	-	LA	1	32	-
	41-44 45	H	-	-	_	1	_	-	_	-	_	_
	46 47	- н	-	-	1	-	-	-	-	-	-	-
	48	-	-	-	-	-	-	-	Н	1	4.4	-
	49 50	H -	-	-	1 -	-	-	-	- AM	- 1	34	-
	51 52	- cu	-	1	-	-	-	-	- AM	1	34	=
	53	Н	-	-	-	-	-	1	-	-	-	-
	54 - 55 56	- н	-	-	1	-	-	-	_	-	-	_
	57 58	_	-	-	-	-	-	-	AM AM	4	35 35	35-35
	59	Н	-	-	-	/ <u>-</u> _	1	_	-	-	-	-
	60 61	C H	-	1	-	-	_	1 -	- н	1	4.4	-
	64 65	H	-	-	-	1	-	-	-	-	-	-
	66	Н	-	-	-	-	-	1	-	-	-	-
	67 - 69 70	-	-	_	-	-	_	_	AM	1	-	_
	71-72	-	-	-	-	-	-	-	-	l -	1 -	l -

10 Meters

Loading number	Gauze section	Species			Number indica					Larv	ae	
number.	Section	:	I	II	III	IA	v	VI	Species	Number	Length	Range
5 Cont.	73 74 75 76 77–78 79 80–82 84–89 90 91 92 93 94 95–96 97 98	H		-	1	1 - 1		1	- C - - - - - - - - - - - - - - - - - -	- 1 2 1	mm. 	mm
	99-100		-	-	_	-	_	-	-	_	-	-

						Surfac	e					
Loading number	Gauze section	Species				of egg ted st				Lar	vae	
	Section		I	II	III	IA	V	VI	Species	Number	Length	Range
1	1 2	Y Y	-	-	-	- 1	2	-	_ AM	-	mm. - 30	mm. -
	3 - 4 5 6 - 9	-	-	-	-	-	-	-	- P	1	24	-
	10 11-20	- - -	-	-	-	-	-	-	HE	1 -	50	-
	22 23 24	- - RO	-	-	-	-	=	-	Н -	1 -	3.6	Ξ
	25 26 - 30	M -	-	1 - -	-	-	1 -	=	-	=	-	-
	31 32 33 - 36	- A -	-	-	-	-	1	-	H - -	1 -	4.1	-
	37 38	-	=	=	-	=	=	-	H RO	1	7.5 9.2	- -
	39 - 40 42 - 43 44	- - RO	- - 1	-	- -	-	-	-	-	-	-	-
	45 - 49 50	- cu	-	-	-	-	-	1	-	-	-	-
	51 52 53 - 57	H - -	-	1 -	-	-	-	-	- Н -	1 -	5.1	-
	58 59 - 61	H -	-	-	-	-	-	1 -	WIF	1 -	3.5	-
	65 66 - 77 78	-	-	-	-	-	-	-	Н - Н	1 -	4.8	-
	79 80	H H	-	-	1 -	-	1	-	-	-	-	-
	81 `82 83	- Н Н	-	1 -	-	-	- 1	-	-	-	-	-
2	1-19 22-41	-	-	-	-	-	-	-	-	-	-	-
	43 - 55 56	-	-	-	-	-	-	-	HE	1	- 50	-
	57 58 59		-	-	-	-	-	- -	HE HE	1	50 49	-
	60 61	-	-	-	-	-	-	-	SY HE	1	8.0 47	-
	62 63	-	-	- - -	-	-	=	=	HE HE HE	1 1 1	47 50 38	- -
	64 - 76 78 - 84 85	-	-		-	-	-	-	- - HE	- - 1	- - 50	-
	86 - 93 94 95	_ _ _	- - -	- 1	- - -	- - -	- - -	-	AM AM	1 1	9.2	-

					٤	urface						
Loading	Gauze	Species				of eggs ed sta				Lar	vae	
number	section	фестер	I	II	III	IV	V	VI	Species	Number	Length	Range
3	1-13 14	- н	-	-	-	-	-	-		-	mm. - -	mm. -
	15-18 19 22-30	RO	-	1	-	- - -	-	-	-	- - -	-	-
	31 32-37 38 39	H CU H	- - -	1 - -	- 1 3	-	-	-	-	-	=	-
	40 42 43	H CU H	-	1 2 -	2 - -	- - -	-	1 1 1	- - - U	-	- 24	-
	44 - 57 58 59	CU H	-	-	1	-	-	-	-	-	-	-
4	62 - 79 80	H H	-	-	-	-	- 1	1 -	-	-	-	-
4	2-13 14 15-20	cu	=	=	1 -	-	-	-	-	-	-	-
	23-29 30 31-38 39	- - RO	-	1	-	-	-	-	H -	1 -	-	-
	40-43 44 45-55	-	=	-	-	1	-	-	U -	1	5.0	-
	56 57 58 59	RO -	-	-	1	-	-	-	-	-	-	-
	60 61-62 63	- H Y	-	-	- 1	1	-	1	SY - -		9.0	=
	65 66 67	CU H RO	-	1 - 1 -	-	-	1 -	-	SY	1	7.5	-
	68 69 70	RO - H RO	-	1	1	1 -		-	-	-	-	
	71-72 73 74	RO H	=	1 1	-	-	-	-	-	-	-	-
	75 76 77 78	н - н	-	-	1 - 1	-	-	-	AM -	1 -	20	-
	79-85	-	-	-	-	-	-	-	-	_	1	1

Loading	Gauze	Species				of eggs				Lar	vae	
number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
											mm.	mm.
5	1	-	-	-	-	-	-	-		-	-	-
	2	-	-	-	-	_	_	-	H -	1 -	5.9	-
	4		_	_	-		_	_	U	1	_	
	5-8	_	-	-	-	-	-	-	_	_	-	-
	9	-	-	-	-	-	-	-	AM	1	-	-
	10		-	-	-	-	-	-	-	-	-	-
	11 12	RO -	-	_	_	_	1 -	-	- U	1	_	-
	13-16	_	-	[-	_	-	-	_			_
	17	Y	-	-	-	_	2	_	-	-	_	-
	18-21	-	-	-	-	-	-	-	-	-	-	-
	23		-	-	-	-	-	-	-	-	-	-
	24 25 - 35	Y -	-	-	1	-	-	_	_	-	_	-
	36	Y	_	_	1	_	_		_	-	_	_
	37-44	_	-	-	_	-	_	-	-	-	-	-
	45-49	-	-	-	-	-	-	-	-	-	-	-
	50		-	-	-	-	-	-	H	1	11.4	1 -
	51 52 - 65	SH -	_		-	-	1	-	-	_	_	_
	66	Y	_	_	1	_	_	-	_	_	_	
		SH	-	-	_	-	1	-	-	-	-	-
	68-78	-	-	-	-	-	-	-		-	-	-
	79 80 - 84	-	-	-	-	-	-	_	H	1	-	-
	85	_	-	-	_	-	-	_	Y	1	6.7	_
	86-88	_	_	-	-	_	_	-	_	_	-	_
	90-97	-	-	-	-	-	-	-	-	-	-	-
	98	SH	-	-	-	-	1	-	RO	1	5.0	-
	99 100	SH SH	1	1	2	-	5 8	1	- Н	1	3.1	_
	101	SH		i	2	_	21	1	-		J.1	
	102	-	_	-	-	_	_	_	-	_	-	-
6	100 99	SH	-	-	-	-	2	-	- RH	1	2.9	-
	98	SH	-	-	1	4	2	_	SH	1	2.9	-
	97	SH	_	-	_	-	ĩ	_	-	-		_
		Y	-	-	-	1	-	-	-	-	-	-
	96	SH	-	-	- 1	3	1	-	RH	1	-	-
	95	WF SH	-	-	1	1	-	-	-	-	-	-
	95	SH	-	-	-	2	-	-	-	_	_	_
	93	WF	_	-	-	ĩ	-	_ [_	-	_	-
	92	-	-	-	-	-	-	-	-	-	-	-
	91	SH	-	-	-	-	1	-	-	-	-	-
	90 - 88 87	- SH	-	-	-	1	-	-	-	-	1 -	-
	07	RO	-	_	-	i	-	-	-	-	-	-
	86	-	_	_	-	-	-	_	_	_	-	
	85	SH	-	1	-	1	-	-	-	-	-	-
	84	-	-	-	-	-	- 1	-	- 1	-	-	_

						Durrac	C					
Loading	Gauze	Species				of egg ted st				Lar	vae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
6 Cont.	83 82 81-71 67-59 58 57 56 55-44 42-34 33 32-31 30 29-27 26	SH RO - SH Y SH RO RO - CN M	1	1	1 2 1 1	- 1 - 2 1 - 1 - -	-		CN	1	7.0	mm.
					10) Meter	rs.					
1	1-3 4 5 6 7 8 9-17 18 19+20 22-30 31 32-33 34 35-40 42-46 47 48 49 50 51 52 53 54-55 56 57 58-59 60 62-63 64	- - - - - - - - - - - - - - - - - - -							- U - H H - G - H H H H C C H H C C H - A M - A M	1 2 2 - 1 1 2 3 6 2 7 11 3 4 1 1 - 2 - 1	20 	22-23

10 Meters

		1										
Loading	Gauze	Species				of egg ted st				Lar	vae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
1											mm.	mm.
Cont.	65 - 72 73	_	_	_	_	_	_	_	- Н	1	5.2	
	74	Н	-	-	-	1	-	-	-	-	-	-
	75 76	CU	_	_	1	_	_	-	-	-	_	_
	77	-	_		-	_	_	_	_	_	_	_
	78	Н	-	-	-	1	-	-	-	-	-	-
	79 80 - 82	-	-	_	_	_	_	_	U -	1 -	17	-
	00-02	_	_	_	_		-	_			_	_
2	1-11	-	-	-	-	-	-	-	-	-	-	-
	12 13-19	_	_	_	_	_	_	_	W	1 -	28	_
	22-29	-	-	-	-	-	-	-	-	-	-	-
	25 26 - 28	-	-	-	_	-	-	-	AM -	1 -	30	-
	29	_	_	_		_	_	_	HE	ī	60	_
	30-41	-	-	-	-	-	-	-	-	-	-	-
	43 - 44 45	-	_	-	_		_	_	HE	1	35	-
	46	_			_	_	_	_	HE	2	38	31-44
	47	-	-	-	-	-	-	-	HE	3	37	35-40
	48 49	_	-	_	_	_	-	_	HE HE	2	43 46	40-46
	50-54	_	_	_	_	_	_	_	-	-	-	_
	55	-	-	-	-	-	-	-	HE	1	51	-
	56 57	_	_	_	_	-	-	_	HE HE	1	55 45	-
	58-60	_	_	_	_	_	_		1112	-	-	_
	61	-	-	-	-	-	-	-	HE	1	35	-
	62 63 - 73	_	_	_	_	-	-	_	HE -	1	40	_
	74	-	-	-	-	-	-	_	HE	1	36	-
	75 - 76	-	-	-	-	-	-	-	HE	- 1	-	-
	78	_	-	_	_	_	_	_	ne -	_	35	-
	79-85	-	-	-	-	-	-	-	-	-	-	••
	86 87-91	_	-	_	_	-	_		HE -	1 -	57 -	_
	92	A	-	2		_	_	_	_	_	_	_
	93	-	-	-	-	-	-	-		-	-	-
	94 95	CU -	_	1 -	_	_	_	-	-	_	_	_
	96	Н	-	-	1	-	-	-	-	_	_	-
		A	-	-	-	1	-	-	-	-	-	-
3	1-8	_	-	-	-	_	_	_	-	_	_	_
	9	-	-	-	-	-	-	-	HE	1	50	-
	10-21 23-32	-	-	_		-	-	-	-	-	_	-
	33	Н	_	_	1	1	_	_	_	_	_	_
	34-36	-	-	-	-	-	-	-	-	-	-	-
	37	Н	-	-	1	-	-		-	-	-	-

10 Meters

					10	Meter	S					
Loading number	Gauze section	Species			umber indica					Iar	vae	
number	Sec cron		I	II	III	IV	V	VI	Species	Number	Length	Range
3 Cont.	38	_	_	_	_	_	_	_	Ū	1	mm. 5.0	mm.
001100	39	Н	-	-	2	-	-	-	-	-	-	-
	40	-	-	-	-	-	-	-	-	-	-	-
	41 42	H H	_	_	1	_	_	_		1	4.8	_
	43-60	-	_	_	_	_	_	_	_	_	-	-
	61	Н	-	-	1	-	-	-	-	-	-	-
	62	H	-	_	1	_	_	_	_		_	_
	64-81	-	-	_	-	-	-	-	-	-	-	-
4	1	-	-	-	-	-	-	-	-	-	-	-
	2	Н	-	-	1	-	-	-	-	-	-	-
	3 4	CU	_	_	_	1	_	_	_	1 -	_	
	5-20	-	_	_	_	_	-	-	_	-	-	-
	23-29	-	-	-	-	-	-	-		l -	-	-
	30 31 - 45	_	_	_	_	-	-	_	H -	1 -	16	_
	46		-	_	-	1 -	-	_	H	1	7.0	_
	47-56	-	-	-	-	-	-	-	-	-	-	-
	57	-	-	-	-	-	-	-	H	2	5.0	4.0-6.1
	58 - 59 60	-	_	_	_	_	_	_	- A	1	6.4	
	61	_	_	_	_	-	-	_	Y	ı	4.8	-
	64	-	-	-	-	-	-	-	-	-	l	-
	65 66 - 74	-	-	-	-	_	-	-	U	1	10.2	-
	75	_	_	_	_	_			HE	1	66	_
	76-82	-	-	-	-	-	-	-	-	-	-	-
5	1-11	-	-	-	-	-	-	-		-	-	-
	12 13-17		-	_	_	_	_	_	HE -	1 -	35	-
	18	H		_	_	1	-	_	-	_	-	_
	19-21	-	-	-	-	-	-	-	-	-	-	-
	23-24	-	-	-	-	1	_	1	-	_	1 :	-
	25	H RO	-	_	1		[_	-	[_
	26-35	-	-	-	_	-	-	-	-	-	-	-
	36	RO	-	-	1	-	-	-		-	-	-
	37 38	_		_	_	_	_	_	Н	2	6.5	6.0-7.0
	39	_	-	_	1 -	_	-	_	Н	1	7.5	-
	40	-	-	-	-	-	-	-	Н	2	7.0	
	41	-	-	-	-	-	-	-	Н -	3	8.2	6.2-11.3
	42 44	-	-	-	_	_		-	H	1	6.0	_
	45	-	-	_	-	-	-	-	-	-	-	-
	46	-	-	-	-	-	-	-	Y	1	17	-
	47 48	RO RO	_	-	-	-	1	_	-	_	[_
	49-53		-	_	-	-	-	_	-	-	-	-
	54	-	-	-	-	-	-	-	Н	1	11	-
	1		*									

10 Meters

					10	we ter	5					
Loading	Gauze	Species				of eggs				lar	vae	
number	section	1	I	II	III	IV	V	VI	Species	Number	Length	Range
5											mm.	mm.
Cont.	55-56	-	-	-	-	-	-	-	-	-	-	-
	57	-			-	-	-	-	H	1	14	-
	58-62	-	_	~	_	_	_	_	HE -	1 -	63	-
	63	_	_	_	-	_	_	_	U	1	4.0	_
	64-65	-	-	-	-	-	-	-	-	_	-	-
	67	-	-	-	-	-	-	-	-	-	_	-
	68 69	-	-	-	-	-	-	-	H	1	8.5 9.0	-
	70	_	-	_	_	_	_	_	H H	1	6.3	-
	71	-	-	-	-	_	-	-	Y	2	3.8	2.9-4.8
	72	SH	-	-	-	1	-	-	-	-	-	-
	73	-	-	-	-	-	-	-	U	1	-	-
	74 - 75 76	-	_	_	_	_	-	-	- Н	1 -	5.2	-
	70	_	_		-	_	_	_	Ü	1	5.0	_
	77	WF	-	-	-		1	-	_	-	-	
	78	_	-	-	-	-	-	-	SH	1	3.5	-
	79	-	-	-	-	-	-	-	SH	3	4.7	4.0-5.0
	80	_	_	-	-	_	_	-	SH Y	3	3.2 2.5	_
	81	-	_	_	_	_	_	_	Y	8	2.5	_
	82	-	-	-	-	-	-	-	Y	8	2.5	-
	83	-	-	-	-	-	-	-	Y	34	2.5	-
	84 85	-	-	-	-	-	-	-	Y	35	2.5	-
	87-90	_	-	_	-	-	_	-	Y -	7 -	2.5	-
	91	-	_	_	_	_	_	_	SH	1	5.7	_
		-		-	-	~	-	-	M	1	-	-
	92	-	-	-	-	-	-	-	LP	1	51	-
	93 94	WF	_	_	1 -	-	-	-	Y	6	-	-
	95	_	_	_	_	_	_	_	M	2	4.8	-
		_	-	~	-	-	_	_	SY	ĩ	8.8	_
	96	-	-	-	-	-	-	-	AM	1	25	-
	97	SH	-	-	-	2	- 5	-	SY	10	8.8	-
	97	- -	-	-	_	_) -	_	SY	3	8.0	-
		-	_	_	_	-	_	_	RO	í	_	_
	98	SH	-	-	-	-	9	-	WF	2	-	-
		-	-	- ;	- 1	-	-	-	SY	8	-	-
	99	-	-	-	-	_	-	_	Y 	7	-	-
		_	_		-	, -	_	_		_	-	-
6	1	SH	-	-	-	-	1	-	Y	13	3.0	_
	2	SH	-	-	-	-	1	-	Y	14	3.0	-
	3	-	-	-	-	-	-	-	SY	1 .	6.3	-
	3 4	-	-	_	_	_	_	_	Y	5	3.3	-
	5	_	_	_		_	_	_	Y	2	4.4	-
	6	-	-	-	-	-	-	-	Y	1	-	-
	7	SH	-	-	-	1	-	**	Y	1	-	-
	8	SH	-	-		1	- 1	-	ΙΥ	lıl	_	-

Table 15.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on $Albatross\ III$ cruise no. 75, May 16-29, 1956--Continued

10 Meters

Loading number	Gauze section	Species			umber d					Lar	vae	
number	section		I	II	III	IV	V	ΛΙ	Species	Number	Length	Range
6											mm.	mm.
Cont.	9	_	_	-	-	_	-	-	-	-	-	_
	10	SH	_	_	-	1	-	-	Y	2	-	-
	11	-	-	-	-	-	-	_	-	-	-	-
	12	-	-	-	-	-	-	-	SH	1	-	-
	13-15	-	-	-	-	_	-	-	-	-	-	-
	16	SH	-	-	-	1	-	-	-	-	-	-
	17	-	-	-	-	-	-	-	SH	2	3.1	2.9-3.4
		-	-	-	-	-	-	-	Y	1	-	-
	18-21	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	U	1	4.4	-
	23-26	-	-	-	-	-	-	-	-	-	-	-
	29-41	-	-	-	-	-	-	-	-	-	-	-
	42	RO	-	-	-	1	-	-	-	-	-	-
	43-57		-	-	-	-	-	-	-	-	-	-
	59-63	-	-	-	-	-	-	-	-	-	-	-
	64	-	-	-	-	-	-	-	Y	1	-	-
	65-71	-	-	-	-	-	-	-	-	-	-	-
	72	-	-	-	-	-	-	-	Y	1	5.2	-
	73	-	-	-	-	-	-	-	-	-	-	-
	74	-	-	-	-	-	-	-	Y	1	3.5	-
	75	-	-	-	-	-	-	-	Y	1	3.4	-
	76	-	-	-	-	-	-	-	Н	1	28	-
	77	-	-	-	-	-	-	-	-	-	-	-

Cauze mamber Cauze mamber Cauze Species Sinindicated stage Cauze Species													
1 1 RH - 66			Species					age			Larv	ae	
1 RH	number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
SH												mm.	mm.
SH CN	1	1	RH	_	_	6	_	_	_	_	_	-	_
2 RH; 3 U 1 1			SH	-	-	3	-	_	_	-	-	-	-
3					1				-		-		
4 U 1		2			l .					i .	1	1	
5					l								
7-9 SH			-	-	-			-	_	-		l	1
10 SH 2 1 1 1					-	1		1	-			l	
11												1	
12						1		1					
13				ł l				l .		i:	1	-	
13		12		-	-	1		-	-	RH	1	2.3	-
14-16		3.0											1
18-20			1										1
22				1			_	l .					
23				-					-	-	-	-	-
24 U - 1 SH 4 4.7 4.4-5.0 25 U - 1 SH 4 4.7 4.4-5.0 26 SH - 1 1 1										1		-	
25									_) n	
26									1	!			4.4-9.0
27 SH 1						1	-	_	-	_	_		-
27				-	-			-	-	-	-	-	-
28-32 33 34-35 37-39 40 RH -		05										1	j.
33 34-35 37-39												1	
34-35 37-39 40 RH												1	
40 RH - 1 1 1			-	-	-	-	-	-	-	-	-	-	
41 42 SH 43 SH									-				
42 SH 2 2 2													
43 SH									1			1	
44 SH 1					-					1			ì
44 SH 1				-	-			-	-	-	-	-	
45 SH 1 1		,,											
46 SH 1 1 1													
48-56				- 1	-			_					
48-56 58-62		47		-	-	,	-	1	-	ŀ	,		
58-62 63 H RO 64-77 79 H 80-93 94 WF 95 		10 50											
63						1							1
64-77				1									
79 80-93 94 WF		4.4			-		-		-				
80-93 94 95 1													
94 WF 1													
2 1-2									l i				
				-	-		-	-	-	-			
	2	1. 2											
	2						_						

Table 16.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on ${\it Albatross~III}$ cruise no. 76, June 11-24, 1956--Continued

	Number of cases												
Loading number	Gauze section	Species			umber o					Lar	vae		
1144400			I	II	III	IA	V	VΙ	Species	Number	Length	Range	
2 Cont.	4-20 21-32	-	-	_	-	-	-	-	-	-	mm. -	mm.	
	33 34 - 37	-	-	-	-	-	-	-	HE -	1 -	48	-	
	38 39	H WF	-	1	-	-	-	-	- HE	- 2	- - 51	-	
	41 - 43 44	-	-	-	-	-	-	-	- HE	- 2	50	-	
	45-51 52 53-60	-	-	- - -	-	-	-	- - -	HE -	2	47	44-50	
	61 - 64 65	- Н	-	-	1	-	-	-	-	-	-	-	
	66 67 - 76 78 - 89	RO -	-	-	-	1 -	-	- - -	-	-	-	-	
	90 91	-	-	-	-	-	-	-	AM -	1 -	45 -	<u>-</u> -	
	92 93 - 95	RO -	-	-	-	1 -	-	-	-	-	-	-	
3	1-5 6 7-8	WF	-	-	-	1	- - -	-	-	-	-	-	
	9 10	H CN	-	1	1 -	-	-	-	-	-	-	-	
	11 12 13	Н - Н	-	-	1 - 1	-	-	-	-	-	-	-	
	14 - 15 16 17	WF	-	-	1	-	-	-	-	-	-	-	
	19 - 21 22	- cu	-	1	1	-	-	-	-	-	-	-	
	23 24 - 26 27	CU - H	-	-	1 - 1	1 -	-	-	-	-	-	-	
	28 - 31 32 33	RO H	-	1 1	1	-	-	- - 1	-	-	-	- - -	
	35 36 - 50	Y -	- -	-	-	-	1 -	-	-	-	-	=	
	51 52 54 - 56	-	-		-	-	-	-	H -	1 -	21	-	
	57 58 - 67	Y -	-	-	1 -	-	-	- -	-	-	-	-	
	68 69 - 72	WF RO	-		1	-		- - -	-	-	-		
	74 - 79 80	-	-	-	-	-	-	-	RO	- 1	10	-	

Loading number	Gauze section	Species				of egg				Larv	rae	
			I	II	III	IV	V	VI	Species	Number	Length	Range
3 Cont.	81 82 83 84 85 86	- - RH CU CU		2 -	- - 1 - 1		-	-	SX RO - RO RO	1 1 - 1 2	mm. 16 5.0 - 1.8 3.2	mm. - - - - 2.9-3.5
4	86 1 2 3-7 8 9-19 21-27 28 29-31 32 33-37 39-41 42 43 44 45-55 57-69 70 71 72 73 76 77 78 79 80 81 82-85 86 87 88	CU WF RO - Y RO RO RH - RH RH RH RH RH RH RH RH RH RH RH RH RH				1	1	1		1		
5	99 91 92 1 2-3 4 5	SH RH SH RH U RH SH RH U RH U RH	1 1 1	2 1 1 1 1	1 - 1 - 2 - 1 4 4 - 1	1 - 1	1 - 1 3 1 1		- - - - - - - - - - - - - - - - - - -	1	2.1	

Table 16.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross Ill cruise no. 76, June 11-24, 1956--Continued

Loading	Gauze	Species			umber indica					Lar	vae	
number	section		I	II	III	IV	v	VI	Species	Number	Length	Range
5											mm.	mm.
Cont.	8	RH	-	-	1	-	-	-	-	-	-	-
	9-14	-	-	-	-	l -	-	-	-	-	-	-
	15	RH U	_	1	2 1	1 -	1 -	2	-	-	-	-
,	16	RH	_	-	_	_	ı	_	Y	2	4.4	3.0-5.9
		-	-	-	-	-	-	-	SH	1	3.1	-
	17	U SH	-	2	1 -	-	-	- 1	SH	7	5.9	2.8-8.8
	18	-	_	_	_		_	_	SH	2	8.2	4.6-11.9
	21	RH	-	-	1	-	2	-	-	-	-	-
1	22	U RH	-	-	1	1	1	-	SH SH	5 3	6.2	3.4-9.0
	23-24	- An	-	_	_	_	_	-	on _	_	10.4	10.0-
	25	RH	_	_	_	ī	_	_	SH	ī	10	-
		-	-	-		-	-	-	G	1	3.4	-
	26 27	U RH	-	1	1	1	1	-	SH SH	3 5	6.2 3.9	3.3-6.8 3.2-5.3
	21	U	-	-	3	_	_	-	- SH		3.9	3.2-3.3
	28	SH	-	_	-	1	-	-	SH	3	5.8	4.1-7.5
	29	-	-	-	-	-	-	-	SH	3	6.0	5.0-8.0
	30 31	- SH	-	-	_	- 1	1		SH -	1	7.0	_
	72	RH	_	1	_	î	î	_	_	_	_	_
	32	SH	-	-	1	1	1	-	-	-	-	-
	33	U SH	_	_	1	1	_	_	- U	1	-	-
	رر	RH	_	_	i	_	_	_	-	-	_	_
	34	SH	-	-	-	-	- 1	1	-	-	-	-
	35	SH RH	-	-	-	-	1 2	-	-	-	-	-
	36	_ An	-	_	-	-	2	-	_			_
	37	υ	_	-	-	1	_	_	_	_	-	_
	38	RH	-	-	2	-	-	-	-	-	-	-
	42 -44 45	_ U	-	1	1	8	_	_	_	-	-	-
	46	RH	-	-	_	-	1	_	_		1	
		Ū	-	-	2	3	2	-	-	-	-	-
	47 -4 8 49	- RH	-	1	-	-	_	-	_	-	-	-
	47	U	-	_	-	1	-	_		_		_
	50	RH	-	_	1	1	-	-	-	-	-	_
	51	RH	-	-	-	1	-	-	-	-	-	-
	52	RH U	-	-	2	1 -	1	-	_	_	-	_
	53	RH			3	1	-	-]	_	_	_
	5.1	Ū	-	2	2	-	-	-		-	-	-
	54 55	SH	-	-	- 1	_	-	-	SH	1 -	5.1	_
	,,	U	-	-	2		_	-	_	_	_	_
	56-58	_	-	-	-	-	-	-	-	-	-	-
	59 64	- RH	-	-	-	-	-	-	М	1	12.0	-
	04	- KH	-	-	1 -	_	1 -	-	SH Y	1	6.2	

						Surfac	e					
Loading number	Gauze section	Species				of egg				Larv	ae	
number	Sec 01011		I	11	III	IA	V	۸ī	Species	Number	Length	Range
5										_	mm. 9.0	mm.
Cont.	65 66	RH RH	_	ī	2	_	1 -	_	M -	1 -	9.0	_
	67	RH	_	_	4	_	2	_	_	_		_
	68	RH	-	-	1	-	_	-	-	-	-	-
	69	U	-	-	1	-	-	-	RH	1	2.9	-
	70 71	RH RH	-	-	1 2	1	2	-	SH	1	3.3	-
	71	U	-	-	-	_	2	-	-	_	_	-
	72	RH	_	_	_	_	ĩ	_	_	_	_	_
	73	U	-	-	1	-	-	-	-	-	-	_
	74	RH	-	1	-	1	1 -	-	-	-	-	-
	me	U RH	-	-	6	-	1	-	-	-	-	-
	75 76	RH	-	ī	11	2	3	-	-	_	_	_
	70	SH	_	ī	2	_	i	_	_	_	_	_
		ט	-	_	_	1	_	-	-	_	-	-
	77-78	-	-	-	-	-	-	-	-	-	-	-
	79	RH	1	4	12	4	2	-	-	-	-	-
	80	SH RH	-	-	5	1 2	4	-	-	_	-	_
	81	RH	i	_	4	í	ī	_	1 -	_	_	_
		SH	-	-	-	-	l ī	_	_	-	-	-
		υ	-	-	-	1	-	-	-	-	-	-
	82	RH	-	1	1	-	3	1	-	-	-	-
6	1	RH	-	-	-	1	-	-	М	1	18	-
		U	-	-	-	1	-	-	-	-	-	-
	2 - 3 4	RH	-	-	-	1	-	-	-	-	-	-
	5	RH	_	_	1	1	1	_	_		_	-
	6	RH	-	_	i	5	2	_	_	_	_	_
		υ	-	-	-	1	-	-	-	-	-	-
	7	RH	-	-	2	2	3	-	-	-	-	-
	8	U	-	-	-	-	2	-	м.	ī	- ,	-
	9-10	_	-	_	_	-	_	-	M	-	6.4	-
i	11	-	_	_	-	_	_	-	RH	1	2.1	-
	12	RH	-	-	-	2	-	-	Y	1	11	-
ł	13	RH	-	-	-	1	1	-	-	-	-	-
	14	SH	-	-	1	-	-	-	- Y	-	-	-
	15	- RH	_	_	_	_	2	-	SH	1	1.9 3.1	-
	16	RH	-	_	2	ī	2	Ι.	RH	2		1.8-2.
		SH	-	-	_	ī	-	-	-	-	-	-
	17	RH	-	1	-	2	-	-	RH	1	1.6	-
	18	RH	-	1	3	4	-	-	Y	1	7.3	-
		U -	_	-	-	3	-	-	RH U	1	1.6	-
	19	RH	-	9	2	8	5		RH	i	1.8	_
		SH	_	_	-	-	ĺ	-	SH	î	2.9	_
		CN	-	-	-	1	4	-	υ	1	1.7	-
		U	-	3	3	8	1	-	-	-	-	-
		1										

Surface

					,	Suriac	е					
Loading	Gauze section	Species			umber dindica					Larv	rae	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
6 Cont.	20	RH SH CN U	2	5 - 2	16 1 6 4	7 3 7 7	4 6 4 1		SH - - -	6 - -	mm. 3.0 - -	mm.
					10	Mete	rs					
1	1-2 3 4 5-11 12 13-15 17 18-19 20 21 22 23 24 25 26 27 28 29 30 31 32 33-36 38 39-42 43 44 45 46-47 48 49 50 51-67 68 69-76 77 79-81 82 83-91 92 93-97				1 3 1 1 3 3 3 - 1 1				- Y SH - LA U - U - U - U - U - U - U - U - SH - H - Y Y SH Y	22 1 - 1 1 - 2 1 1 1 1 - 1 1 1 1 1 1 1 1	2.8 	2.4-3.2

Table 16.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 76, June 11-24, 1956--Continued

10 Meters

Loading	Gauze	Species				of eggs				Lar	vae	
number	section	•	I	II	III	IA	v	VI	Species	Number	Length	Range
2	4 5 6	-	-	-	-	-	-	-	M M M	2 1 1	mm. 6.0 6.8 6.3	,mm. 5.4-6.6 -
	7 8 9 10	-	-		-	-	-	- - -	- M - M M	1 1 1	5.9 - - 7.2	-
	12-21 23-24 25 26-32	-		-	- - -	-	-	-	HE -	1	31	-
	33 34-38 39 40-60 62-64	CU - RO -	-	-	2 -	-	-	-	-	-	-	-
	65 66-69 70 71-76	=	-	-	-	-	-	-	HE HE	1	54 - 23	-
	77 78-80 81 82 83-92	- - -	-	- - -	-	-		- - -	HE HE HE	1 1	40 - 44 42	35-45 - - -
	93 94-100	WF	-	-	2 -	-	-	-	-	-	-	-
3	1 2-11 12 13	CU -	- - -	- - -	-	1	-	- - -	М - -	1 - -	6.7	-
	14 15 16 17-27	- RO -	- - -	- - -	1	-	- - -	-	CU - -	1 - -	-	- - -
	28 29 30-39 41-57 58	H - -	-		-		-	-	- M - - H	1 1	- - - 33	-
	59 - 76 77 78 - 83	- - -		1111	-	-	-	-	Y - RH	1	5.1	-
	84 85 86 - 88 89			1 1 1	-	- - -	-	-	G G - RH	1 2 - 1	2.3	2.0-2.5
	90 - 92 93	-	-	-	-	-	-	-	- RH	1	-	=

10 Meters

	10 Me ters												
Loading number	Gauze section	Species				of eggs ted sta				Larv	ae		
110000	500 01011		I	II	III	IV	V	VI	Species	Number	Length	Range	
3 Cont.	94	SH WF RO			-	2 1 -	1 1 1	- - 1	CU RH -	1 2 -	mm. 6.2 3.3	mm. - -	
4	1 2-13 14 15 16 17 18 19 20	- - - - - RO	-			-		1 1 1 1 1 1 1 1	Y - M - M R - H Y	1 - 2 - 2 1 - 1 1	20 - 9.5 - 9.5 7.0 - 12.4 5.5	9.0-10.0 9.0-10.0 - 9.0-10.0	
	22-23 24 25 26 27-39 41-46 47 48-50 51 52 53		-			-			- H - U - U - U - Y - Y	1 - 1 - 2 - 3	15		
	54 55 56 57 58 60 61 62-78 79 80-87 88 89 90-91 93-99	WF				1			Y Y Y Y Y - WF - Y U	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.5 4.3 5.5 4.4 12 - 15 - 6.2 - 10 7.0	3.3-5.5	
5	100 1 2 3-4 5 6 7 8	CN			1				SH SH SH RO G	1 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.5	2.2-3.5	

Table 16.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on ${\it Albatross~III}$ cruise no. 76, June 11-24, 1956--Continued

10 Meters

Note to the second seco												
Loading	Gauze	Species			umber o					Larv	rae	
number	section	1	I	II	III	IV	V	VI	Species	Number	Length	Range
5 Cont.	12	-	_	-	-	-	-	-	Y	1	mm. -	mm. -
	13 - 15 16	_	_	_	_	_	_	_	SH	2	3.3	3.2-3.5
	17	_	_	_	_	_	_	_	SH	4	3.4	2.9-4.0
	18	-	-	-	-	-	-	-	SH	10	3.9	2.8-6.4
	19 21	RH -	-	_	-	_	3	_	SH SH	17 3	4.8 3.9	2.1 - 9.6 3.0 - 5.0
	22	_	_	_	_	_	_	_	SH	1	6.4	-
	23	-	-	-	-	-	-	-	SH	6	-	-
	24 25	- U	-	-	1	_	-	_	SHU	1 2	-	-
	26	_	_		-	_	_	_	U U	2	_	-
	27	RH	-	-	-	-	1	-	U	1	7.0	-
	28	-	-	-	-	-	-	-	SH	2	4.0	3.0-5.0
	29	_	_		_	-	-	_	Y SH	1	7.1	_
	30	_	_	-	-	_	_	_	-	-	_	_
	31	-	-	-	-	-	-	-	SH	2	6.6	4.0-9.2
	32 33	-	-	_	_	-	-	_	- U	1	-	_
	34	_	_	_		I -	_		บ็	2	_	_
	35	-	-	-	-	-		-	-	-	-	-
	36 37	-	-	-	-	-	-	-	SHU	17 3	-	-
	38	-	_	_	-	_	_	-	SH	3	5.5	5.3-5.9
		_	-	-	-	-	_	_	RH	1	4.0	-
	40	Ū	-	-	-	1	-	-	RH	1	3.0	-
	41 42	_	-	_	_	-	_	_	SH SH	1 2	5.0	_
	43-51	-	-	-	-	-	-	-	-	-	_	_
	52 53	-	-	-	-	-	-	-	S	1	2.2	-
	53 54	_	_	_	-	_	_	_	U	1	5.0	_
	55	-	-	_	-	_	-	_	SH	ı	6.6	_
		-	-	-	-	-	-	-	RO	1	1.6	-
	56 57	-	_	_	-	-	-	_	SH	1	_	_
	58	-	_	_	_	_	_	_	Ü	i	_	_
	59	-	-	-	-	-	-	-	-	-	-	-
	60 61	-	_	-	-	_	_	_	SH	1	-	-
	01	_	_	_		_	_	_	U	1	2.6	_
	62	-	-	-	-	-	_	-	RH	1	2.6	-
	63	-	-	-	-	-	-	-	U	2	3.0	-
	63 64	U -	_ :	_	-	1	_	-	RH -	2	1.9	_
	65	-	_	_	_	-	_	_	SH	2	3.6	3.5-3.7
	66	-	-	-	-	-	-	-	RH	2	2.9	-
	67 - 69 70	_		_	-	-	-	_	SH	1	2 77	-
	70	_	_	_	-	-	_	_	RH	1	3.7 1.9	-
	71	RH	-	-	-	-	1	-	RH	4	2.3	2.2-2.4

Table 16.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on ${\it Albatross\ III}$ cruise no. 76, June 11-24, 1956--Continued

10 Meters

	F											
Loading number	Gauze section	Species		in	humber indica	of egg	s age			Lar	vae	
			I	II	III	IV	V	VI	Species	Number	Length	Range
5 Cont.	72	_	-	_	_	_	_	_	_	on.	mm.	mm.
	73 74	U -	-	1 -	1 -	-	-	-	RH RH	2 6	2.0	1.6-2.5
	75 76	Ū -	-	-	1	1	-	-	S RH SH	1 10 1	2.2	-
	10	-	-	-	-	-	-	-	RH S	1 3	2.0	-
6	78	-	-	-	-	-	-	-	U -	1 -	2.0	-
	79 80	-	-	-	-	-	-	-	G -	1 -	10.5	=
	81 82	SH RH	-	-	-	1	- - 1	-	_ 	1 - -	-	-
	83-84	U -	-	-	-	-	1	-	-	-	-	-
	85	-	-		-	-	-	-	SH RH S	1 1 2	4.4 2.4 3.2	- - 2.9-3.6
	86 87 88	- CN	-	-	-	-	-	-	RH -	1 -	2.6	-
	89 90	- -	-	-	-	1 -		-	SH S RH	1 1 1	2.1	-
	91 - 92 93	-	-	-	-	-	-	-	S - RH	1 -	2.2	-
	94 95	-	-	-	-	-	-	-	S SH	1 3 1	2.2	-
	96 97	CN SH U	-	-	1 2	1 1 -	- - 2	- - -	- - S	- - 2	3.2	- - 3.1-3.3
	98	RH	-	-	3	1	1	-	S	1	-	-

Table 17. -- Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 71, February 20-March 2, 1956

Loading	Gauze	section	Number of sections	Distance	Section	Conversion factor for
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.
			Su	rface		
1	1	36	36	Miles 187.0	5. 19	0.96
•	37	66	30	160.0	5. 33	0.94
	67	82	16	110.0	6.88	0.73
2	1 25	24 44	24 20	153.0 119.5	6.38 5.98	0.78
	45	63	19	122.0	6.42	0.78
	64	84	21	128.5	6.12	0.82
3	2	30	29	171.0	5.90	0.85
	34 47	45 57	12 11	107.5 98.0	8.96 8.91	0.56 0.56
	59	63	5	40.0	8.00	0.62
4	1	28	28	180.0	6.43	0.78
	30	60	31	173.0	5.58	0.90
			10 N	Meters		
1	2 27	26 49	25	187.0	7.48	0.67
	50	63	23 14	160.0 110.0	6.96 7.86	0.72 0.64
2	1	26	26	119.5	4.60	1.09
_	27	51	25	122.0	4.88	1.02
	52	77	26	128.5	4.94	1.01
3	1 39	35 58	35 20	171.0	4.89	1.02
	60	79	20	107.5 98.0	5.38 4.90	0.93 1.02
	81	87	7	40.0	5.71	0.88
4	1	32	32	180.0	5.63	0.89
	34	66	33	173.0	5.24	0.95

Table 18. --Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 72, March 21-31, 1956

Loading number		section	Number of sections	Distance travelled	Section equivalent	Conversion factor for no./5 mi.
	Start	Finish	exposed			110. / 5 IIII.
			Su	rface		
1	1 23 43 61	21 41 59 85	21 19 17 25	Miles 108.0 98.5 98.0 153.0	5.14 5.18 5.76 6.12	0.97 0.96 0.87 0.82
2	1 36 61	34 56 86	34 21 26	197.0 126.5 155.0	5.79 6.02 5.96	0.86 0.83 0.84
3	1 29 65	27 64 92	27 36 28	133.0 210.5 153.0	4.93 5.85 5.46	1.01 0.85 0.92
4	1 21 59 61 78		21 37 18	119.0 210.0 101.5	5.67 5.68 5.64	0.88 0.88 0.89
5	73*	89	17	99.0	5.82	0.86
			10 N	/Ieters		
1	1 15 26 45	12 24 42 72	12 10 17 28	108.0 98.5 98.0 153.0	9.00 9.85 5.76 5.46	0.56 0.51 0.87 0.92
2	4 36 62	34 55 87	31 20 26	197.0 126.5 155.0	6.35 6.32 5.96	0.79 0.79 0.84
3	1 27 62	24 59 88	24 33 27	133.0 210.5 153.0	5.54 6.38 5.67	0.90 0.78 0.88
4	1 21 59	18 56 76	18 36 18	119.0 210.0 99.0	6.61 5.83 5.50	0.76 0.86 0.91
5	77	90	14	96.5	6.8 9	0.72

^{*} Unexposed portion of gauze left from a short run

Table 19. --Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 73, April 17-28, 1956

Loading		section	Number of sections	Distance travelled	Section equivalent	Conversion factor for	
number	Start	Finish	exposed	travelled	cquivasent	no./5 mi.	
			Sur	face			
				Miles			
1	$\begin{array}{c} 1 \\ 24 \end{array}$	21 45	21 22	127.0 112.0	6.05 5.09	0.83 0.98	
	47 70	68 90	22 21	116.0 120.0	5. 27 5. 71	0.95 0.88	
2	1	20	20	109.0	5, 45	0.92	
-	22 44	42 64	21 21	120.0 117.0	5.71 5.57	0.88	
	66	86	21	121.5	5.78	0.86	
3	1	18	18	100.0	5.56	0.90	
	20 40	38 59	19 20	102.0 114.0	5.37 5.70	0.93 0.88	
	62	82	21	118.0	5.62	0.89	
4	1 28	26 45	26 18	145.0 117.0	5.58 6.50	0.90 0.77	
	52 74	71 92	20 19	114.0 115.0	5.70 6.05	0.88 0.83	
5	7	23	17	117.5	6.91	0.72	
	25 62	60 81	36 20	216.5 117.0	6. 01 5. 85	0.83 0.85	
	83	100	18	117.0	6.50	0.77	
			101	Meters			
1	1 25	21 43	21 19	127.0 112.0	6.05 5.89	0.83 0.85	
	46	66	21	116.0	5.52	0.91	
	69	87	19	120.0	6.32	0.79	
2	1 22	20 43	20 22	109.0 120.0	5.45 5.45	0.92 0.92	
	45 67	65 88	21 22	117.0 121.5	5.57 5.52	0.90 0.91	
3	1	18	18	100.0	5, 56	0.90	
	20 41	39 62	20 22	102.0 114.0	5.10 5.18	0.98 0.97	
	65	85	21	118.0	5.62	0.89	
4	1 27	25 46	25 20	145.0 117.0	5.85 5.85	0.85 0.85	
	48 69	66 89	19 21	114.0 115.0	6.00 5.48	0.83 0.91	
-							
5	1 22	20 61	20 40	117,5 216.5	5.88 5.41	0.85 0.92	
	64 84	82 100	19 17	117.0 117.0	6.16 6.88	0.81 0.73	

Table 20. -- Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 75, May 16-29, 1956

Loading number	Gauze section		Number of sections	Distance	Section	Conversion factor for		
	Start	Finish	exposed	travelled	equivalent	no. /5 mi.		
Surface								
1	1 22 42 65	20 40 61 83	20 19 20 19	Miles 116.0 103.0 113.0 118.0	5.80 5.42 5.65 6.21	0.86 0.92 0.88 0.81		
2	1	19	19	112.0	5.89	0.85		
	22	41	20	111.0	5.55	0.90		
	43	76	34	234.0	6.88	0.73		
	78	95	18	117.5	6.53	0.77		
3	1	19	19	114.0	6.00	0.83		
	22	40	19	115.0	6.05	0.83		
	42	59	18	117.5	6.53	0.76		
	62	80	19	123.5	6.50	0.77		
4	1	20	20	112.0	5.60	0.89		
	23	63	41	222.0	5.41	0.92		
	65	85	21	116.5	5.55	0.90		
5	1	21	21	109.0	5. 19	0.96		
	23	44	22	117.0	5. 32	0.94		
	45	66	22	109.0	4. 95	1.01		
	68	88	21	115.0	5. 48	0.91		
	90	102	12	78.0	6. 50	0.77		
6	100*	71	30	151.0	5. 03	0.99		
	67	44	24	145.5	6. 06	0.83		
	42	26	16	95.5	5. 97	0.84		

Table 20. --Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 75, May 16-29, 1956--Continued

Loading	Gauze	section	Number of sections	Distance	Section	Conversion factor for		
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.		
	10 Meters							
1	1 22	20 40	20 19	Miles 116.0 103.0	5.80 5.42	0.86 0.92		
	42	60	19	113.0	5.95	0.84		
	62	82	21	118.0	5.62	0.89		
2	1	19	19	112.0	5.89	0.85		
	22	41	20	111.0	5.55	0.90		
	43	78	36	236.5	6.57	0.76		
	79	96	18	120.0	6.67	0.75		
3	1	21	21	114.0	5. 43	0.92		
	23	42	20	115.0	5. 75	0.87		
	43	62	20	117.5	5. 88	0.85		
	64	81	18	123.5	6. 86	0.73		
4	1	20	20	112.0	5.60	0.89		
	23	61	39	222.0	5.69	0.88		
	64	82	19	116.5	6.13	0.82		
5	1	21	21	109.0	5.19	0.96		
	23	42	20	117.0	5.85	0.85		
	44	65	22	109.0	4.95	1.01		
	67	85	19	115.0	6.05	0.83		
	87	99	13	78.0	6.00	0.83		
6	1	26	26	151.0	5.81	0.86		
	29	57	29	145.5	5.02	1.00		
	59	77	19	95.5	5.03	0.99		

^{*} Gauze wound on spool backwards

Table 21. --Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 76, June 11-24, 1956

Loading number	Gauze section		Number of sections	Distance	Section	Conversion factor for		
	Start	Finish	exposed	travelled	equivalent	no./5 mi.		
	Surface							
1	1 18 37 58 79	16 35 56 77 95	16 18 20 20 17	Miles 93.0 114.0 109.0 123.0 121.5	5.81 6.33 5.45 6.15 7.15	0.86 0.79 0.92 0.81 0.70		
2	1 21 41 61 78	20 39 60 76 95	20 19 20 16	109.5 116.5 111.0 101.5 113.5	5. 48 6. 13 5. 55 6. 34 6. 31	0.91 0.82 0.90 0.79 0.79		
3	1 19 35 54 74	17 33 52 72 86	17 15 18 19 13	112.0 123.0 108.0 122.0 83.5	6.59 8.20 6.00 6.42 6.42	0.76 0.61 0.83 0.78 0.78		
4	1 21 39 57 76	19 37 55 73 92	19 17 17 17 17	117.0 121.0 120.0 116.0 114.0	6.16 7.11 7.06 6.82 6.70	0.81 0.70 0.71 0.73 0.75		
5	1 21 42 64	18 38 59 82	18 18 18 19	107.5 115.0 102.5 119.5	5.97 6.39 5.69 6.29	0.84 0.78 0.88 0.79		
6	1	20	20	129.5	6.48	0.77		

Table 21. --Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 76, June 11-24, 1956--Continued

	Gauze	section	Number of			Conversion		
Loading number	Start	Finish	sections exposed	Distance travelled	Section equivalent	factor for no./5 mi.		
	Start	Fillish	exposed					
10 Meters								
				Miles				
1	1	15	15	93.0	6.20	0.81		
	17	36	20	114.0	5.70	0.88		
	38	57	20	109.0	5. 45	0.92		
	58	77	20	123.0	6.15	0.81		
	79	97	19	121.5	6.39	0.78		
2	100*	81	20	109.5	5, 48	0,91		
	80	62	19	116.5	6.13	0.82		
	60	42	19	111.0	5.84	0.86		
	41	23	19	107.5	5.66	0.88		
	21	4	18	113.5	6.31	0.79		
3	1	19	19	112.5	5.92	0.84		
Ü	20	39	20	123.0	6.15	0.81		
	41	59	19	108.0	5.68	0.88		
	60	79	20	122.0	6.10	0.82		
	80	94	15	83.5	5.57	0.90		
4	1	20	20	114.5	5,73	0.87		
-	22	39	18	118.5	6,58	0.76		
	41	58	18	120.0	6.67	0.75		
	60	80	21	116.0	5.52	0.91		
	81	100	20	114.0	5.70	0.88		
5	1	19	19	107.5	5,66	0,88		
	21	38	18	115.0	6.39	0.78		
	40	58	19	102.5	5, 39	0.93		
	59	76	18	117.0	6.50	0.77		
6	78	98	20	127.0	6.35	0.79		

* Gauze wound on spool backwards.

GPO 926484





